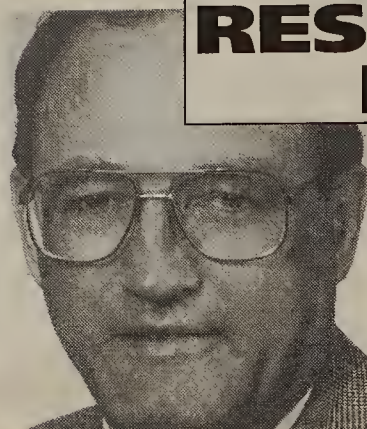


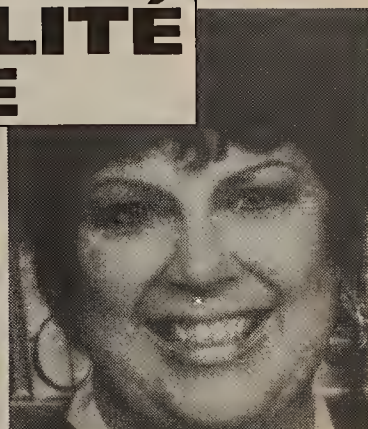
# **ACCOUNTABILITY**

# **RESPONSABILITÉ**

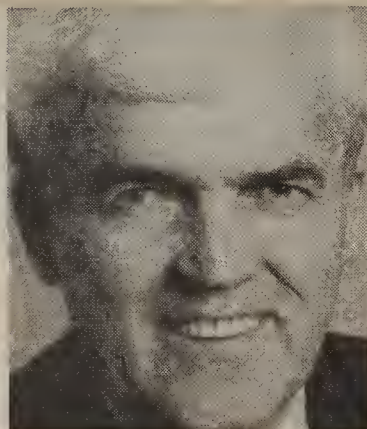
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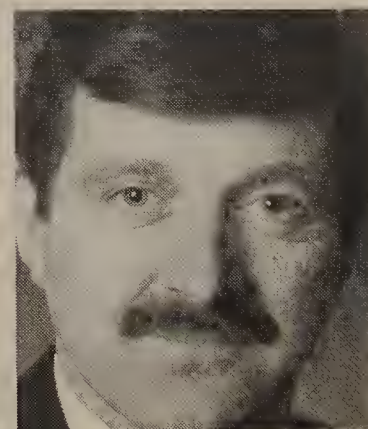
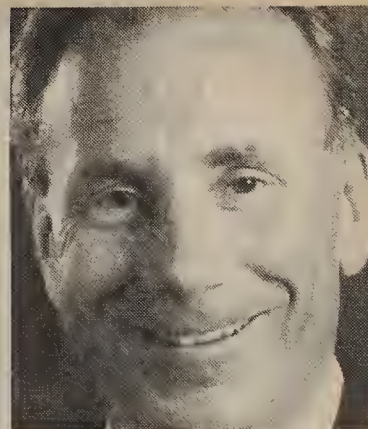
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Édition spéciale du Bulletin de l'ACPPU  
May 1996 mai



■  
**By Whom?**  
**To Whom?**  
**For What?**  
**What Cost?**



■  
**Qui?**  
**Devant qui?**  
**Pourquoi?**  
**À quel prix?**





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## CAUT ACPPU BULLETIN

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## Avant-propos

# L'obligation de rendre compte : les universitaires en savent quelque chose

Par Joyce Lorimer

L'expression à la mode des années 1990. Le concept est tout à fait sensé mais il a perdu de sa crédibilité à cause des abus auxquels il donne lieu. Dans les milieux collégiaux et universitaires, il a généralement servi de prétexte aux gouvernements pour faire oublier des compressions budgétaires irresponsables et l'échec de stratégies de création d'emploi. Les fonctionnaires l'ont adopté pour motiver la création de bureaucraties centralisées et hiérarchisées qui s'ingèrent dans l'autonomie des universités. Certains administrateurs universitaires et collégiaux s'en servent pour justifier leurs tentatives d'exclure les professeurs, le personnel et les étudiants d'une direction transparente, collégiale et responsable.

Bien qu'elle ait perdu quelque peu de sa valeur, la notion d'obligation de rendre compte est néanmoins primordiale pour la réalisation de la mission des universités au Canada. Les établissements d'enseignement postsecondaire sont subventionnés par l'État et il doit continuer d'en être ainsi. Ces établissements visent à offrir un enseignement supérieur de haute qualité à tous les citoyens qui peuvent en profiter et à encourager la libre quête de la recherche dans l'intérêt public. Les personnes qui ont la chance de travailler au sein du remarquable réseau universitaire canadien se doivent de le préserver et d'en améliorer la qualité et l'accessibilité parce qu'il est un bien public. Ces personnes doivent également rendre compte de manière transparente de son mieux-être à la population qu'il dessert.

Les universitaires sont formés pour faire des analyses poussées, des critiques exhaustives et pour susciter de vigoureux débats lorsqu'ils examinent des données, des idées et des systèmes. On peut et on doit utiliser ces mêmes outils pour établir des méthodes d'évaluation adéquates des responsabilités des universités canadiennes, afin d'évaluer réellement ce qu'est une université, et non pas des statistiques dénuées de sens et conçues pour servir les intérêts particuliers de partis politiques ou de groupes de pression donnés du secteur des entreprises.

Le présent numéro du Bulletin révèle que les universités doivent rendre compte au grand public de diverses manières. Elles doivent d'abord être transparentes pour que le public puisse examiner minutieusement leur gestion. Elles doivent également exiger des normes élevées, et s'attendre à les obtenir,

en enseignement et en recherche, ce qui comprend, comme Ken Field le mentionne, des bibliothèques de grande qualité et des services d'information électronique.

Toutefois, à l'instar de Jeffrey Simpson, du *Globe and Mail*, je suis sceptique lorsque les comptables et les soi-disant spécialistes en productivité commencent à vouloir diriger les programmes d'éducation. On ne gagne pas grand-chose à vouloir transformer nos universités en usines à diplômes dotées de techniques de production ressemblant à des transporteurs à courroie qui, en dernière analyse, donneront des produits identiques sans imagination.

Un comité spécial de l'ACPPU, présidé par Bill Bruneau, se penche depuis deux ans sur le dossier des indicateurs de rendement. Il signe un article dans le présent numéro sur l'utilisation des indicateurs de rendement et sur les abus auxquels ils donnent lieu, ainsi que sur l'ébauche d'un projet d'énoncé de principes de l'ACPPU sur la question. L'ACPPU a également commencé à étudier deux sortes d'agrément : l'agrément des établissements d'enseignement par rapport à des programmes particulier et l'agrément des professeurs d'université.

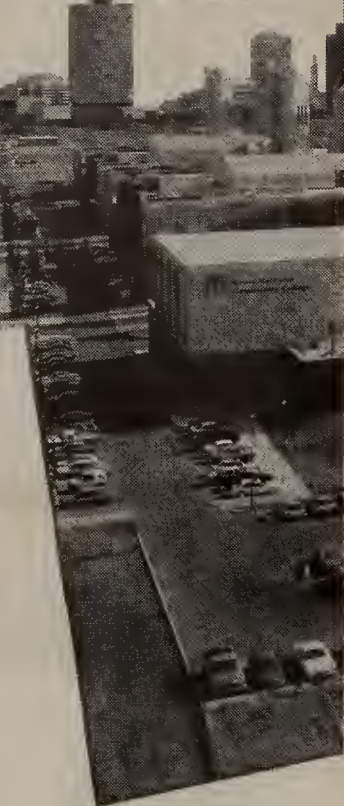
Comme le fait remarquer George De Benedetti, le personnel universitaire a déjà fait de grands progrès en matière de responsabilité publique en prévoyant des articles sur le sujet dans les conventions collectives. L'ACPPU recommande sans cesse aux associations de professeurs de négocier des dispositions reliées aux droits et aux responsabilités professionnels, aux conflits d'intérêts ainsi qu'à la fraude et à la conduite frauduleuse dans la recherche.

En tant qu'universitaires, nous devons nous assurer que le grand public reçoit des comptes en ce qui concerne d'autres indicateurs importants de rendement qui intéressent moins nos élus. Comme le soutient Roger Gannon, les administrations universitaires doivent être responsables de la gérance de la liberté universitaire contre les personnes qui voudraient la limiter ou la dévaluer. De même, selon Jennifer Bankier, les universités doivent être responsables de la prestation d'un milieu pédagogique et de travail au sein duquel tous les professeurs, employés et étudiants peuvent travailler au mieux de leur capacité sans craindre d'être harcelés ou d'être victimes de discrimination.

Un journaliste du réseau anglais de Radio-Canada a fait remarquer récemment

que les politiciens fédéraux et provinciaux exigeaient des autres de rendre des comptes mais dissimulaient inutilement l'information sur leurs propres activités derrière un épais secret.

Les politiques de financement des gouvernements fédéral et provinciaux ont miné la santé des universités canadiennes de-



puis vingt ans. Les élus doivent mettre en pratique ce qu'ils prônent et créer des indicateurs de rendement transparents et responsables pour leurs politiques en matière d'éducation. Et s'ils devaient le faire, je suppose qu'ils constateraient que leurs pratiques ne sont pas à la hauteur de leurs énoncés de mission ou, à la vérité, d'aucune évaluation raisonnable de l'intérêt public. ■

## On the Cover ■ Couverture

The Council of Ministers  
of Education, Canada —  
Accountability for Higher  
Education Policies

Le Conseil des ministres  
de l'Éducation, Canada  
doit rendre compte  
de ses politiques en  
enseignement supérieur.

- 1 Paul Ramsey  
British Columbia
- 2 Jack Ady  
Alberta
- 3 Robert Mitchell  
Saskatchewan
- 4 Linda McIntosh  
Manitoba
- 5 John Snobelen  
Ontario

- 6 Pauline Marois  
Québec
- 7 Roger Grimes  
Newfoundland
- 8 Jeannie Lea  
Prince Edward Island
- 9 John MacEachern  
Nova Scotia
- 10 Roly J. MacIntyre  
New Brunswick

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8	7	6



## Accountability in Canadian Education L'imputabilité dans l'éducation canadienne

The Council of Ministers of Education, Canada (CMEC) is holding the second National Consultation on Education, "Accountability in Canadian Education: Are We Getting What We Value?," at Grant MacEwan Community College in Edmonton May 9 to 12. This conference will bring together some 300 delegates from stakeholders, business, labour and from the public.

This special edition of the CAUT *Bulletin* discusses various aspects of accountability in higher education. There will be a full report about the CMEC conference in the September issue of the *Bulletin*.

Du 9 au 12 mai, le Conseil des ministres de l'Éducation du Canada tient sa deuxième consultation nationale sur l'éducation au Collège communautaire Grant MacEwan d'Edmonton. Le congrès réunira quelque 300 délégués représentant des groupes d'intérêt, des gens d'affaires, des syndicalistes et des particuliers. Le thème général est l'obligation de rendre compte.

Ce numéro spécial du *Bulletin* de l'ACPPU traite de divers aspects de l'obligation de rendre compte dans le domaine de l'enseignement supérieur. Un rapport complet sur le congrès du CMEC sera publié dans le numéro de septembre du *Bulletin*.



— Edmonton, Alberta —

### Foreword

## Accountability — No Stranger to Academics

By Joyce Lorimer

ACCOUNTABILITY IS THE BUZZWORD of the 1990s and, although a perfectly sensible concept, it has lost some of its credibility through overuse and abuse. In university and college circles governments have commonly adopted it as an excuse for irresponsible budget cuts and as a cover for failed job strategies. Some civil servants have embraced it as rationale for creating new top-heavy centralized bureaucracies to interfere in university autonomy. For some university and college administrators it provides a perverse justification for attempts to exclude faculty, staff and students from transparent and accountable, collegial governance.

Even though its currency has become somewhat devalued, accountability is, nevertheless, central to achieving the mission of universities in this country. Canada's post-secondary institutions are and should remain, publicly funded institutions. They are intended to provide a high quality post-secondary education to all citizens who are able to benefit from it, and to foster the free pursuit of research in the public good. Those who are privileged to work in Canada's out-

standing university system have a duty to preserve and enhance its quality and accessibility, as a public good, and to be openly accountable for its well-being to the public they serve.

Academics are trained to bring rigorous analysis, exhaustive criticism and vigorous debate to the examination of data, ideas and systems. These same tools can and must be used to determine appropriate accountability measures for Canadian universities — to achieve true measures of what a university is about — not meaningless statistics designed to serve the special interests of individual political parties or particular corporate sector lobby groups.

This issue of the *Bulletin* suggests that universities need to be accountable in a wide variety of ways to the general public. First of all they must be open and transparent to public scrutiny. They must also demand and expect high academic standards in teaching and research, which includes, as Ken Field notes, high quality libraries and electronic information services.

Like Jeffrey Simpson of *The Globe and Mail*, however, I am sceptical when the accountants and self-styled 'efficiency experts' start

to want to run education programs. There is little to be gained from turning our universities into degree mills with conveyor-belt production techniques which ultimately produce unimaginatively identical products.

An ad hoc committee of CAUT, chaired by Bill Beuneau, has spent the last two years studying the question of performance indicators. This issue of the *Bulletin* contains his discussion of the use and misuse of performance indicators as well as the first draft of a proposed CAUT policy statement on the subject. CAUT has also begun to examine two forms of accreditation — that of institutions as opposed to specific programs, and the accreditation of university teachers.

As George De Benedetti notes, academic staff have already made great strides towards public accountability through the articles in their collective agreements. CAUT has consistently recommended that faculty associations negotiate provisions relating to professional rights and responsibilities, conflict of interest and fraud and misconduct in academic research.

As academics we must also make sure the general public receives an accounting of other important performance measures

which are of less interest to elected politicians. University administrations must, as Roger Gannon argues, be accountable for their stewardship of academic freedom against those who would limit or devalue it. Similarly, as Jennifer Bankier writes, they must be accountable for the provision of an academic and working environment in which all faculty, staff and students can work to the best of their ability without fear of harassment or discrimination.

As a journalist on the CBC remarked in a recent commentary, federal and provincial politicians routinely call for public accountability in others but shroud the information about their own activities in layers of unnecessary secrecy.

The health of Canada's universities has been adversely affected for the last two decades by the funding policies of federal and provincial governments. Elected politicians must practice what they preach and create open, accountable, performance measures for their own educational policies. Were they to do so, I suspect they would find their practices do not measure up to their mission statements or, indeed, to any reasonable assessment of the public interest. ■



# Accountability — What Does it

## Administrations Are Accountable for Academic Freedom

By Roger Gannon

MUCH HAS BEEN WRITTEN AND SAID in recent years by politicians, university administrators and academics about the accountability of academics in publicly-funded institutions. But there has been much less said about the financial, administrative and academic accountability of university administrations in publicly-funded institutions.

Let us here redress this imbalance by looking at management accountability as it relates to maintaining academic freedom.

In October 1995, Peter Gzowski discussed university problems with four university presidents and one principal. All, without exception, spoke highly of the need for academic freedom. However, a reading of the transcript of that radio conversation indicates that none spoke in any detail about the means by which university administrators would ensure the survival of this vital principle.

Experience indicates that the vast majority of university administrations believe in academic freedom. But there are a few which fail to uphold the academic freedom of their faculty. Some do not fully understand what academic freedom means in practice; others do not realize that the principle needs to be actively supported on a daily basis, both in word and in deed. Still others from time to time get cold feet when the going gets rough politically and/or the prospect looms of a large outlay of cash. And a smaller, but still significant, number of administrations not only fail to uphold academic freedom but actively engage in activities inimical to it, again usually for financial reasons. Several illustrations:

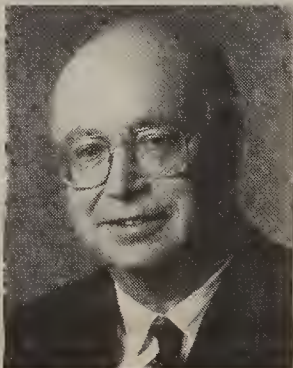
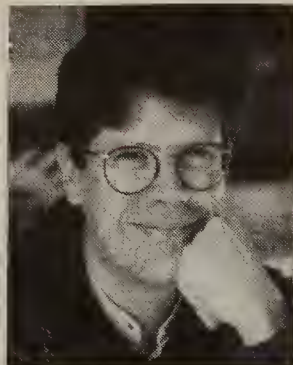
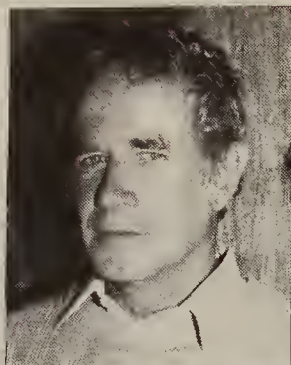
Recently, an associate dean wrote to a departmental chair warning her and her departmental members of getting involved in classroom discussions of the implications of recent budget cuts on a "decent education."

At the same university, another associate dean refused to sign an SHRC grant proposal because, he argued, it was not in conformity with the research priorities of the institution. After a faculty outcry, protests from the research team involved, and a public disavowal by the dean of the faculty in question, the matter was resolved. But by this time the deadline for grant submissions had passed and the proposal was thus effectively killed.

At another university, a dean (who did not have such a right) refused to sign a grant proposal because he didn't think it "up to much" and because he wanted to demonstrate to the professor his concern re his teaching!

University administrations should consider a few basic principles for ensuring the maintenance of academic freedom and appropriate management accountability. University administrations should:

- provide an atmosphere in which faculty know from experience that they can pursue their research, teaching and scholarly



*CAUT has long been committed to the principle of accountability in Canadian universities. CAUT's Standing Committee Chairs (above — clockwise from top left: Roger Gannon, Ken Field, George De Benedetti & Jennifer Bankier) highlight this principle as they discuss exactly what accountability means for academic freedom, academic librarianship, collective bargaining & employment equity.*

activities without vexatious interference from the public at large, university administrators or other faculty. This would include, for example, making it clear that administrations will stand behind faculty who are sued while going about their scholarly, research and community work as prescribed in handbooks/agreements etc. (It is more than a little ironic that the same university administrations which take great pride in the publicity obtained by their "star" academics run for cover when it comes to defending a faculty member who has earned not "good" publicity but "bad" publicity while carrying out his or her scholarly and contractual duties in a perfectly appropriate manner);

- negotiate an adequate, legally-entrenched clause in collective agreements or handbooks re academic freedom, together with the right to efficient grievance and arbitration procedures. In this regard, the CAUT model clause on academic freedom is a particularly good one;

- negotiate effective financial exigency clauses and redundancy articles which allow for orderly and fair closures of departments or faculties (articles which cannot be used to

"pick-off" unpopular individuals) and show due respect for tenure, the vital legal underpinning of academic freedom;

- provide means by which faculty grievances, whatever their nature, can be heard in a timely fashion with consistent regard for considerations of due process, including the right of appeal. Lack of such a process, or tolerance of a severely-flawed procedure, may in effect act as an impediment to the academic freedom of a faculty member. In a recent Ontario case, the misuse and abuse of an already-flawed procedure has led to severe mental illness for a member, who in effect has been denied his contractual right to pursue his research, with the result that, among other things, he will have an uphill battle gaining tenure and the freedom to pursue a scholarly career;

- protect academia against the corporate agenda to determine the curriculum, since a slavish acceptance of (some might argue any acceptance of) such an agenda is a very real threat to academic freedom;

- guard against viewing the "student as consumer" as a determining factor in the setting of university and academic policy. Although students are one of a number of

important constituencies to be considered in the setting of academic policy, they are not the only one. Administrations must not lose sight of the primary role that faculty have had and must continue to have in the determination of such policy;

- have in place some reporting mechanism by which the university community can see how many complaints or grievances have alleged violations of academic freedom and how many have been sustained. Perhaps the mechanism should be designed to delineate the causes of those abuses that were shown to have been real. In this regard, it would be useful if universities could compare notes for possible remediation strategies;

- negotiate with faculty associations provision for regular, independent, reviews of management performance as it applies to all aspects of university life including academic freedom;

- hold regular management/faculty seminars for those most likely to be faced with decisions having implications for academic freedom, e.g. deans, chairs and those on tenure committees and hiring committees.

With all of the above in place, academic freedom would be well on its way to a healthy and continuing future and the Academic Freedom and Tenure Committee would have far less work to do. ■

*(Roger Gannon is chair of the CAUT Academic Freedom and Tenure Committee.)*

## Les administrations sont responsables de la liberté universitaire

ON A BEAUCOUP PARLÉ DE L'OBLIGATION de rendre compte des universitaires dans les établissements financés par les deniers publics mais moins de celle de l'administration de ces mêmes établissements. Qu'en est-il de cette obligation de rendre compte face au maintien de la liberté universitaire?

Il semble que la grande majorité des administrations universitaires croient en la liberté universitaire mais peu y donne son soutien : soit que l'on ne comprenne pas sa signification, soit que l'on lui nuise pour des raisons financières.

Les administrations universitaires devraient respecter quelques principes élémentaires pour garantir le maintien de la liberté universitaire et une obligation de rendre compte suffisante de la part de la direction. Voici quelques-uns de ces principes: offrir aux professeurs un milieu où ils peuvent poursuivre leurs activités de recherche et d'enseignement sans craindre l'ingérence du public, des administrateurs ou d'autres professeurs; négocier une clause dans les conventions collectives ou les guides sur la liberté universitaire ainsi que le droit à des procédures efficaces de règlement de grief et d'arbitrage; négocier des articles sur l'urgence financière et l'excédent de personnel qui permettent la fermeture en douceur de départements et de facultés; protéger les universitaires contre la tendance du secteur privé à déterminer les programmes d'études; négocier avec les associations de professeurs une disposition prévoyant des examens indépendants du rendement des administrateurs. ■



# Mean for Canadian Universities?

## Accountability in Canadian University Libraries

By Ken Field

UNIVERSITY LIBRARIES AND THE SERVICES they offer are an intrinsic part of the missions of universities. They house and provide access to the resources which are integral to the support of teaching and research. They are the places in which students learn of the tools necessary to build a foundation in their discipline and in which the fruits of the labours of research are made available. Academic librarians are the teachers and researchers in university libraries. It is they who teach the students how to use the tools necessary for learning. It is also they who explore and experiment with new means of making the accumulated knowledge of mankind accessible.

University libraries in Canada have been subjected to numerous budgetary pressures over the last decade. Among these are, the rising costs of serials, decreasing financial support from their institutions, the need to keep up with the seemingly relentless advances in computer and information technology, the need to slow the deterioration of existing library collections and the provision of space for collections. Yet university libraries have managed to maintain reasonable levels of support to their constituencies in the face of this barrage of increasing costs and decreasing funding. However the erosion of the quality of the services and resources is beginning to cut deep.

Over the past decade the rising cost of acquiring the resources necessary to support teaching and research has far outstripped increases in library acquisition budgets. Double digit inflation has become the norm in the serials industry. This is particularly evident in the scientific, technical and medical (STM) journals where between 1984 and 1994 the average price increase was a staggering 172 per cent for periodicals published in the U.S. Few if any academic library collections are made up entirely of STM journals and this dramatic increase is tempered somewhat by the relatively small increases in journal prices

in the arts, humanities and social sciences. Nonetheless for the same period for periodicals published in the U.S. spanning all disciplines the average increase was 146 per cent. By any measure, increases of this magnitude place tremendous pressure on the ability of libraries to provide resources to their users.

Library acquisition budgets in Ontario rose by 22 per cent over the 1984-94 period. It is easy to see this comes nowhere near addressing inflation of 146 per cent. Academic libraries are being forced to carry out massive serial cancellation programs. The University of British Columbia, for instance, has cancelled over 5000 subscriptions worth \$1.3 million over the past 4 years in order to not only stay within their budget allocation but also to maintain an appropriate balance between monographs and serials. They are not alone in this as most libraries try to contend with increasing prices.

Advances in the electronic dissemination of information are also having an impact on the ability of academic libraries to fulfil their role in universities. Over the past 5 years the Internet and the World Wide Web (WWW) have become increasingly popular means of disseminating information.

The use of electronic technology for the dissemination of information is still in its infancy. Issues like: how will libraries access and archive material published electronically, are universities prepared for the substantial capital costs of migrating from paper-based systems to electronic systems, and how long will libraries have to maintain paper-based systems alongside electronic systems are just now being addressed. The financial pressure being felt by academic libraries makes this transition more difficult.

As the costs of acquiring necessary resources rise and increases to library budgets fall short of the amounts required to maintain current collections, the preservation of existing collections is neglected. The deterioration of library collections is the inevitable result of much use and the problem of acid paper. The decay of paper with acid as a component is dramatic and swift with books becoming unusable within about 50 years of publication. The costs associated with this are not being factored into the equation of the continuing viability of academic library

collections. In the very near future vast amounts of knowledge, 50 per cent of current university collections by some estimates, will be lost.

In addition to pressures on materials budgets there is also pressure on academic librarians and staff in libraries. Institutions continue to look for ways of reducing academic and staff salary budgets by means of attrition, redundancy, etc. Filling positions which are vacated for these or other reasons is becoming less frequent thus placing greater amounts of work on those who remain. Increases in workload have a number of negative effects like reduction of services, degradation of the quality of services and lowering of morale.

It is in this environment that calls for greater accountability are being heard from provincial governments. It appears that accountability is equated with reducing costs and being more efficient. This is fine if one has a system which is squandering resources while being accountable to no one. I suggest that there is such a dearth of resources for libraries that simply trying to maintain levels of support for teaching and research requires every precious penny to be used wisely.

Academic libraries by the nature of their role in universities must be accountable to the communities they serve. Every time a student enters a library to research a paper topic, do required reading or complete an assignment, or when faculty draw up course syllabi or use the library to track research they are evaluating the resources and services of the library. If the library is unable to meet their needs they tend to be very vocal.

For the moment, governments at the provincial and federal levels provide the greatest percentage of funding to universities. They do this because universities provide both social and economic benefits to communities, provinces and the country. Even so, levels of funding from government continue to drop and as a result the quality of education and in particular of academic libraries has been diminishing. One might ask therefore to whom is government accountable for the erosion of something so important to our society? ■

(Ken Field is Chair of the CAUT Librarians Committee.)

## La responsabilité publique des bibliothèques d'université

LES BIBLIOTHÈQUES UNIVERSITAIRES ET les services qu'elles offrent font partie intégrante de la mission des universités. Leurs ressources soutiennent l'enseignement et la recherche. Elles mettent à la disposition d'autrui le savoir mondial.

Au cours des dernières décennies, les bibliothèques d'université n'ont pas échappé à la flambée des coûts des périodiques ni au couperet budgétaire. Elles ont tout de même réussi à offrir un niveau raisonnable de services. Depuis dix ans, les coûts d'acquisition des ressources nécessaires au soutien de l'enseignement et de la recherche ont dépassé les budgets des bibliothèques. Le phénomène est particulièrement évident dans le cas des revues scientifiques, médicales et techniques. Devant de telles hausses, les bibliothèques n'ont d'autre choix que d'annuler massivement des abonnements à des périodiques.

Par ailleurs, l'automatisation de la diffusion de l'information a fait des bonds de géant et a influé sur la capacité des bibliothèques à remplir leur rôle. Bien que l'Internet et le W3 soient devenus des moyens très populaires de communiquer l'information, la diffusion électronique de l'information en est encore à ses premiers balbutiements et les compressions budgétaires rendent plus difficiles la transition.

Les compressions budgétaires touchent également le personnel. Les effectifs sont réduits, ce qui diminue la qualité des services et augmente la charge de travail. Dans un tel contexte, l'obligation de rendre compte, exigée par les gouvernements provinciaux, se traduit par des coûts réduits en retour de plus d'efficacité.

De par leur nature, les bibliothèques doivent rendre des comptes aux collectivités qu'elles desservent. Les gouvernements, quant à eux, dont les subventions aux universités diminuent constamment, entraînant du coup une baisse de la qualité de services si importants à notre société, à qui doivent-ils rendre des comptes? ■

## The Librarian: A Database Software to Organize and Manage Your Personal Library

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# Accountability — What Does it

## Accountability is the Heart & Soul of Collective Agreements

By George J. De Benedetti

**C**AUT FIRST BECAME INVOLVED IN collective bargaining in the late 1960s, and today more than half of the 28,000 members are covered by collective agreements negotiated under labour law. Has then the unionization of professors and librarians made academic staff less accountable for their performance?

CAUT has always accepted the principle that academic staff are accountable for their performance. This accountability is reflected in the many collective agreements that have been negotiated between the Board of Governors and the academic staff at Canadian universities.

Most collective agreements include an article that guarantees the freedom of expression, the freedom to pursue research and publicize the results, the freedom to criticize the employer and the union, and, among other freedoms, the freedom from institutional censorship.

Such rights are granted by university employers because they recognize that the good of society is served by the free search for knowledge and its free exposition. In return, professors and librarians have agreed, through collective agreements, to exercise these freedoms in a responsible way.

Virtually every one of these collective agreements specifies the professional responsibilities of academic staff as some combination of three general components: one is teaching, or the performance of duties in the operation of the library, the second is research, professional, or creative activity, and the third is service to the university, or to the wider community. Such articles also tend to limit the amount of outside professional activities of academic staff, so as not to interfere with their primary contractual duties.

Other articles hold professors and librarians accountable through mandatory and extensive performance evaluations. Collegial and peer review processes in evaluating academic staff for academic appointments, tenure and promotion, and the granting of sabbatical leaves have carried over into collective

agreements. Such evaluations are especially critical at times of tenure and promotion, and some agreements specify annual evaluations.

There are few professions where members are so regularly and systematically scrutinized in their performance by so many. Performance reviews of academics not only include assessments from superiors, as in other sectors, but also include reviews from colleagues, students, and experts from outside the university community.

If academic staff members fail to meet their professional responsibilities in a satisfactory manner, they can be disciplined and eventually dismissed under the collective agreement.

More recently, CAUT has developed a model clause on fraud and misconduct in academic research and scholarly activity, and faculty associations have taken the lead in introducing such articles in collective agreements. These articles deal with issues of fabrication, falsification, plagiarism, failure to recognize by due acknowledgment the substantive contributions of others (including students), and the unauthorized and intentional diversion of the research funds of the university, federal or provincial granting councils, or sponsors of research.

As well, such articles deal with the necessity to reveal material conflict of interest to sponsors and those commissioning work, or when faculty members are asked to test products for sale or for distribution to the public, and the necessity to reveal to the university employer any material financial interest in a company that contracts with the employer to undertake research.

The tragedy at Concordia might have been avoided if the university administration had accepted the proposal of the faculty association to include an article on fraud and misconduct in the collective agreement before the Fabrikant incident. Today, partly due to events at Concordia and the pressure of the various granting councils, university administrations are more willing to accept such articles in collective agreements.

This is an area in which faculty associations have led the way in self-imposing restrictions on the behaviour of their members. The collective agreement is a good vehicle to codify these guidelines and procedures.

CAUT has been instrumental in devel-

oping policies and model clauses in other areas such as sexual harassment and equity considerations. Often, faculty associations are pressing university administrators to adopt such policies in collective agreements.

Currently, the Collective Bargaining and Economic Benefits Committee is drafting a revised model clause on suspension, discipline, and dismissal. The value of progressive discipline is that its application can correct behaviour before the situation escalates to the point where university administrations have to consider outright dismissal as a solution. The introduction of such an article in collective agreements can stem public criticism that faculty members can only be dismissed for the gravest of offenses and cannot be disciplined for lesser offenses.

In an era of reduced government funding for universities, governments and university administrators are introducing performance indicators in the university environment. Such indicators affect the terms and conditions of employment of professors and librarians. They can influence tenure and promotion decisions, salaries, career progress increments, departmental or unit budgets, etc.

Faculty members and librarians are not opposed to performance indicators when they are consistent with the goals and mission of the university, and CAUT holds that the parties should negotiate such indicators in a collective agreement.

Articles on performance indicators, like other articles in a collective agreement, are subject to proper grievance and arbitration procedures. Such procedures exist in collective agreements to protect both the employer and the academic staff member from arbitrary and unjust action: the employer and the union each has the right to grieve.

The collective bargaining process has not diminished faculty responsibility at universities. On the contrary, collective agreements have made it possible to spell out these responsibilities more explicitly, and the remedial action that employers can take if professors and librarians do not fulfil their responsibilities. As well, the grievance and arbitration procedures in collective agreements ensure redress from arbitrary action. ■

(George J. De Benedetti is Chair of the CAUT Collective Bargaining and Economic Benefits Committee.)

## L'obligation de rendre : au coeur des conventions collectives

**L'**ENGAGEMENT DE L'ACPPU DANS LA négociation collective remonte aux années 1960. L'ACPPU a toujours accepté le principe selon lequel les universitaires sont responsables de leur rendement. Cette obligation de rendre compte se reflète dans les conventions collectives du personnel universitaire. La plupart prévoit un article garantissant la liberté d'expression, la liberté de poursuivre des recherches et d'en publier les résultats, la liberté de critiquer l'employeur et le syndicat et la liberté d'échapper à la censure de l'université. Les employeurs accordent ces droits parce qu'ils reconnaissent que la société profite de la libre quête du savoir et de sa libre diffusion. Les professeurs et les bibliothécaires ont accepté en retour d'exercer ces droits de manière responsable.

Les responsabilités des universitaires sont énoncées dans presque toutes les conventions collectives. Il s'agit de l'enseignement, ou le travail dans une bibliothèque, de la recherche ou de l'activité de création, et le service à la collectivité.

D'autres articles obligent les professeurs et les bibliothécaires à rendre des comptes au moyen d'évaluations complètes de leur rendement. L'évaluation par les pairs est partie prenante de ce processus. Si les universitaires respectent mal leurs responsabilités professionnelles, ils peuvent faire l'objet de sanctions disciplinaires, voire être congédiés, en vertu de leur convention collective.

L'ACPPU a élaboré une clause modèle sur la fraude et la conduite frauduleuse dans la recherche et les activités intellectuelles. Des associations l'ont incorporée dans leur convention collective sous la forme d'articles sur le plagiat, les conflits d'intérêts, etc.

La question des indicateurs de rendement prend de plus en plus d'importance en ces temps d'austérité. Ces indicateurs doivent toutefois être compatibles avec les objectifs et la mission des universités. Négociés dans une convention collective, ils donnent à l'employeur et au syndicat le droit de se protéger contre des actions injustes. ■

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# Mean for Canadian Universities?

## Equity — More Questions than Answers

By Jennifer Bankier

A CRITICAL MEASURE OF THE EXCELLENCE of Canadian universities is how well they facilitate the full development of the talents of all Canadians. Canada is a pluralistic society made up of many diverse communities with differing, legitimate perspectives and concerns.

In the past, access to Canadian universities has been restricted for people from many sectors of Canadian society for historic reasons that have nothing to do with the inherent abilities of the members of these disadvantaged groups. Members of these equity-seeking communities are now challenging these historic patterns of exclusion.

It is imperative that effective equity accountability measures be developed to allow both governments and members of equity-seeking communities to determine the progress (or the lack thereof) made by Canadian universities toward the goals of accessibility, equality and non-discrimination. Some suggestions follow.

**Remedies for Discrimination** — Does the university have anti-discrimination policies with mechanisms to handle complaints of discrimination from students and staff? Do these procedures provide remedies for discrimination based on race, creed, colour, ancestry, citizenship, ethnic or national origin, sex, marital status, family relationship, sexual orientation, age, physical or mental disability or illness, clerical or lay status, language, place of residence, political or religious affiliation, belief or practice, personal or social life style or behaviour?

How many complaints of discrimination have been received under internal university anti-discrimination mechanisms and by the provincial Human Rights Commission with respect to this university for each year since 1970? What were the results of these complaints and what remedial action was taken if the complaints were upheld?

**Employment Equity** — What is the overall percentage representation of members of the various equity-seeking communities among academic and support staff and university administrators? What percentage increase/decrease has there been over the period since 1970? How does this percentage compare with national and provincial averages? What are the equivalent percentages for each department or other academic unit?

What percentage of academic units a) equal or exceed the availability data for qualified personnel from equity-seeking groups in their discipline, and b) have an action plan which conforms to equity employment guidelines developed by CAUT or provincial faculty associations for recruiting and appointing academics and support staff from equity-seeking groups? Does the university have an action plan for recruiting members of equity-seeking groups to senior administrative positions?

What are the results of a comparative analysis of salaries and benefits members of historically disadvantaged and historically advantaged groups (e.g. women and men)

with similar levels of experience? What attempts have taken place since 1970 to rectify anomalies in the compensation of members of historically disadvantaged groups? When the results of these rectification attempts are measured have they been successful in achieving equal pay for work of equal value?

Do university policies for appointment, reappointment, tenure and promotion of academics, support staff and administrators specifically address the legitimacy of different career patterns?

What percentage of employees leaving the university during the past two years are members of equity-seeking groups? How does this departure rate compare with the proportion of each group in the total university population? Does the university have a system of exit interviews to determine why members of equity-seeking groups leave the university?

Has the university conducted surveys of its staff during the past two years to determine the views of members of historically disadvantaged groups with respect to the equity climate and working conditions? What were the results of these surveys?

**Educational Equity** — What is the overall percentage representation of members of the various equity-seeking communities among all undergraduate and graduate students attending the university? What percentage increase/decrease has there been over the period since 1970? What are the equivalent percentages for each academic unit? How do these percentages compare with national and provincial averages? What percentage of academic units equal or exceed the availability data for students from equity-seeking groups in their local community and for Canada as a whole?

*In an era of reduced government funding for universities, governments & university administrators are introducing performance indicators in the university environment. Such indicators affect the terms and conditions of employment of professors & librarians. They can influence tenure & promotion decisions, salaries, career progress increments, and departmental or unit budgets. Faculty members & librarians are not opposed to performance indicators when they are consistent with the goals & mission of the university. However, CAUT holds that such indicators should be a matter of negotiation between the parties.*

What percentage of the university's budget is allocated to the recruitment of students from equity-seeking groups in fields where they have traditionally been under-represented?

What is the university's ranking with respect to its tuition fees, compared to all other universities in Canada? What is the total amount of financial support provided by the university to students in constant dollars for each year since 1970? What proportion of this assistance is allocated to students from equity-seeking groups?

How many specialized academic programs permit in-depth scholarly study of the experiences, needs and perspectives of members of equity-seeking groups (e.g. Women's

Studies, Aboriginal Studies, Black Studies), and, at what level, i.e. undergraduate or graduate? What percentage is the budget of each such department of the average of all academic departmental budgets since the inception of the particular program? What is the equivalent percentage of the average of the five smallest academic departmental budgets? What percentage is support for all such programs of the total university budget for each year since 1970?

What percentage of a university's programs have been assessed at either the initial approval or academic review stages for inclusion of courses and portions of courses which address relevant realities and concerns of members of equity-seeking groups? What percentage of the assessments involved participation by scholars from historically excluded groups? Of the programs reviewed, what percentage of the programs had made reasonable efforts to offer curricula that were inclusive?

What percentage of the university's budget is allocated to a) faculty development programs which sensitize teachers to the reality and concerns of students from equity-seeking groups in the classroom; b) assisting faculty with the revision of courses and course materials to reflect relevant realities and perspectives of members of equity-seeking groups; and c) assisting academics to respond to the special needs of students with a disability (e.g. special equipment)?

Do student course evaluations contain specific questions on equity bias in course materials, class atmosphere and language? Has the university conducted any surveys during the past two years to determine the views of students from historically excluded groups with respect to the equity climate in

What percentage of the university's budget has been allocated to child care for the period since 1970? Are there on-campus child care services with a) enough spaces for faculty, students and staff; b) extended and weekend hours; and c) subsidies for both students and staff in need? What fees are charged for the use of these facilities? ■

(Jennifer Bankier is Chair of the CAUT Status of Women Committee.)

## L'équité : plus de questions que de réponses

UNE MÉTHODE IMPORTANTE POUR évaluer l'excellence des universités canadiennes consiste à déterminer dans quelle mesure elles facilitent le plein épanouissement de tous les Canadiens. Il ne faut pas perdre de vue que le Canada est une société pluraliste et que les membres des communautés voulant l'équité s'opposent maintenant aux tendances qui les ont historiquement exclus de nombreux secteurs de la société canadienne.

Il est impérieux que des critères efficaces d'évaluation de l'équité et de l'obligation de rendre compte soient mis en place afin de permettre aux gouvernements et aux membres des communautés voulant l'équité de déterminer les progrès accomplis par les universités canadiennes pour réaliser les objectifs de l'accessibilité, d'égalité et de non-discrimination.

Les critères suggérés sont nombreux et en voici quelques exemples. D'abord, il faut trouver des solutions pour éliminer la discrimination en se demandant si l'université dispose de politiques antidiscriminatoires prévoyant des mécanismes de règlement des plaintes venant d'étudiants et du personnel.

Pour assurer l'équité en matière d'emploi, il faut se demander quelle est la proportion de membres des communautés voulant l'équité au sein du personnel et de l'administration de l'université; se conforme-t-on aux lignes directrices de l'ACPPU pour recruter du personnel appartenant à ces communautés; a-t-on respecté le principe du salaire égal pour un travail égal.

Dans le cas de l'équité en matière d'éducation, il faut se demander quelle est la proportion des membres des communautés voulant l'équité à tous les cycles d'études universitaires; quel est le pourcentage du budget de l'université alloué au recrutement d'étudiants appartenant à ces groupes dans les disciplines où ils sont traditionnellement sous-représentés. Dans l'évaluation des programmes, s'est-on demandé combien offraient un contenu non exclusif; quelle proportion du budget de l'université est allouée à des programmes sensibilisant les professeurs aux préoccupations des étudiants des groupes voulant l'équité.

En ce qui concerne les bibliothèques, il faut se demander quelle est la proportion du budget alloué aux ouvrages qui examinent la réalité des membres des groupes voulant l'équité dans toutes les disciplines. La question se pose aussi pour les services de soutien et les services de garde à l'enfance sur les campus. ■



## Don't Fix What's Not Broken

By William Bruneau

A GRANDCHILD TURNS FIVE THIS MONTH, and I've bought a toy fire engine for her. The instruction book says that the toy talks, blinks, and shrieks not to mention its self-propulsion. I test it and find the blinker doesn't blink and the shrieker doesn't shriek. An expert at the toy shop repairs the engine's electronic innards, but the store manager has faxed a nasty message back to head office, since this is the third engine to be returned in a single week.

Uncle Melvyn is ill and asks his doctor for appropriate treatment. He shows signs of an intestinal blockage of some kind. Little does Mel know that his physician has got on the homeopathic bandwagon. Dr. X recommends three herbal treatments and a regime of physical exercise. After weeks of agony and two trips to the hospital, Uncle Mel is found to have a fast-growing benign tumour and it is removed. The family and Maude decide to hold the doctor accountable, bringing her before the College of Physicians and Surgeons and possibly to sue her in the B.C. Supreme Court.

These two parables show just some of the many "accountabilities" at large in late 20th-century Canada. The toy store is accountable to me for the quality of its products but within limited parameters (for instance, making sure the product works as advertised). The manufacturer is accountable to the store and to me but only if (a) the product causes numerous complaints or doesn't sell, or (b) the product injures my granddaughter in some way. And the manufacturer is accountable to its stockholders or owners if its design and marketing result in financial losses.

In all these cases, something happens if the toy is broken, or if the chain of accountability is broken. If it's not broken, no one would think seriously of interfering. There's just too much complexity in the electronics and too much at stake in fiddling unnecessarily with the entire organization of huge factories in four countries.

On the other hand the medical doctor is accountable to her profession (on a variety of standards and criteria that she has helped to negotiate), to the state (to whom she sells services under Medicare) and to her patient (who has a right to expect competent care). The idea that the doctor's "product" could be "broken" has a rather odd ring. But if one pushes hard the concept just might be made to apply. I'll come back to this idea at the end.

I count at least six types of accountability here and it would be easy to find more. How bizarre, then, to find that Alberta's Premier Ralph Klein and Ontario's Education Minister John Snobelen see accountability in just two ways: value for money, and assured control (but not necessarily quality assurance). Toy manufacturers and sellers would expect a more sophisticated approach. What's going on here?

The simplicity of the Klein-Snobelen view comes from the simplicity of their motives. They wish to find new forms of control over government spending and programs, and that means control over us.

Now, few politicians would be so crass as to speak of outright control as their aim. Rather, like Premier Frank McKenna in New Brunswick, and the civil servants of British

*For some politicians 'accountability' is just a back door to more control.*



The Toy Fire Truck —

If it doesn't work as advertised, someone's accountable, either the store or the manufacturer. The question is, should Canadian universities carry the same guarantee?

Columbia and Nova Scotia, the talk is of "performance indicators," outcome measures, and "information frameworks." In Ontario, the Ontario Council on University Affairs flirted in 1994 with the idea of tying provincial economic performance to statistical measures of university performance.

But behind this talk lies an unspoken premise: that universities and colleges have not revealed the truth about themselves. They have simply not been accountable enough. The way to make them accountable is through performance indicators (PIs) and outcome measures (OMs).

PIs show, among many other things, how much it costs per "unit" to educate people in classics and electronic engineering, how quickly students pass through the system, how many books and computers are at students' disposal, how quickly students are employed after graduation, and whether they end up working in the fields for which they were trained.

Outcome measures include students' "degree of satisfaction" with their educational "experiences" and success rates in national and provincial accreditation tests and examinations such as bar exams and national medical tests.

Some of these PIs and OMs are helpful and interesting to university and college teachers. Many of our colleagues routinely do research to develop and to understand measures of exactly this kind. All of us think of them when we organize our teaching and research. For these and other reasons Canada's universities and colleges are tremendously well described already.

That is why Canadian university and college teachers were surprised by such documents as Alberta's *Measuring Up*, a broadside on efficient and client-friendly "reform" of government activities in that province. There are now equivalent documents in every province, and in the Council of Ministers of Education, Canada.

Numerous politicians, civil servants, and pressure groups have decided that universities and colleges do not "respond" quickly enough to their wishes or to the "needs" of the economy. They say this, but at least some of the time, may want to embarrass us into action, to force us to change our programs, our methods, our admissions practices, and our linkages to organized business.

In plain terms, they are talking about new approaches to the control of the post-secondary sector.

The search for control takes unexpected forms. One not so new approach speaks of learner-centred education. This sounds like

the language of the late 1960s when students and relevance were more than just catchwords in a vast cultural upheaval. But the new talk about learners is not about social and cultural experiments.

In a recent note on learner-centred education, Bruce More, President of the Confederation of University Faculty Associations of British Columbia, wrote that "this is not necessarily 'learner-centred' as defined in the literature on teaching/learning methods. Rather it is a version of consumerism, delivering the educational product to the client through the means she/he finds most comfortable."

He adds that the post-secondary sector knows it can do its job better, especially when it comes to easier transfer of student academic credits among institutions, and better planned and executed services to students.

He concludes that public universities and colleges have a good basis for making those improvements for they run on an "accountability system with checks and balances beyond the vagaries of the marketplace. Our advantage is dedicated professionals with a continuing mandate for improving their curriculum and themselves, and striving to do better for students. Our advantage is a system of shared governance, where professionals are able to act like professionals, and need not be subservient to corporate profitability in order to maintain their employment."

A look at the history of universities puts a little more meat on the bones of More's argument. Since the beginning, the state (and at times, the Church) has wanted to know what we are up to. In many English-speaking universities there is a person called The Visitor, and that person's job is to see that the university does not venture down seditious or legally doubtful paths. If a Visitor found that her/his university was indeed on such a path — if the university was "broken" — then and only then would she/he call on the state to intervene.

Even in weak democracies, the state has generally recognized that it is inconsistent to say it wants imaginative and critical and far-reaching thinking from its universities, and yet insist on detailed control of universities' programs and practices. It has been content to let universities compete with one another for students and grants, and to offer public funding on a set of unwritten understandings about the obligations of the university to make strong-minded democrats of students and to prepare them for long professional lives of research and practice.

It's only when those understandings are in peril, only when the system is truly broken, that democratic states intervene. When

the system is working well (although of course it could always work better), state intervention has been typically inefficient and expensive. And the last time the state turned to statistical indicators in order to "get control" of the universities — the 1920s fascination with time-and-motion studies and scientific management — the whole thing collapsed on itself. Bureaucracies multiplied but universities did not noticeably improve. Controls and statistics simply do not and cannot force responsible change in education.

We come again to the central question: "Is the system broken?" On several criteria, the system is working well. It has accommodated a huge influx of students since 1945, and at ever-lower per-student outlays of public funds. It has become research-intensive and teaching-intensive in a way that earns world-wide praise. It is an integral element in the ongoing solution of Canada's great social and economic problems just as it has been since the beginning.

Despite the pace of change since the 1960s, Canadian universities and colleges have kept the channels of communication open to the public, the students, the business community and alumni. We have an enormous store of data to show that all of these things are true.

Yet most of us agree that some things about universities and colleges are not right.

We are not sure how best to accredit new universities and colleges or new (and old) programs of study in certain areas. CAUT is at work, as are many others, on this question.

Much worse, Canadians do not know exactly why university/college administrations and governing boards take the key financial decisions they do. Unlike elected school boards and provincial governments, university finance committees frequently still operate in secret. This is wrong.

If accountability means transparency in making decisions, then we have a problem with accountability. Perhaps our system of accountability is, after all, broken in that key respect. CAUT's 1993 report on university governance continues to attract interest. But when will our universities, colleges and provincial governments do something about it?

Yes, indeed, there is something to be done about accountability in Canadian universities. But should we take up a toy-store version of accountability? Should we put faith in expensive new measures of university performance, and pretend that they give us "accountability"? Should we invite a new level of direct or indirect state control, for whatever ideological reason?

We think not. Accountability should and must be a condition that strengthens honesty, transparency and openness in governance in universities and colleges as in all of public life. It should be a framework in which we educators can freely argue out the means and ends of education, responsibly working to change as the world changes yet committed to the permanent demands of a life of inquiry. Down the other roads lies just one thing — mediocrity.

Post-secondary education isn't broken. It isn't perfect. But it isn't broken. ■

(William Bruneau is Chair of the CAUT Ad Hoc Committee on Performance Indicators and Accountability.)

See also proposed policy statement page 9.



## Calling All Canadian Postdoctoral Fellows

By Cheryl Wellington  
& Caren Helbing

A POSTDOCTORAL FELLOWSHIP HAS TRADITIONALLY been viewed as a time of great excitement. Ideally, it is a period of professional maturation when one assumes increasing responsibility for generating an independent line of research. However, many postdoctoral fellows are facing increasing difficulties in securing permanent positions. One general comment often heard today is that there is a mass overproduction of PhD graduates for the limited number of academic positions. Therefore, many postdoctoral fellows may be leaving the academic track to pursue careers in industry, teaching, consulting, or in something entirely unrelated to their field of expertise. Despite these anecdotes, there is virtually no concrete information on the status of postdoctoral fellows in North America. Although postdoctoral fellows represent the major products of a university, we do not have an accurate estimate of their number, their fields of interest or career fates. Indeed, it is surprising to learn that while North America prides itself on the calibre of its researchers, it has so little information about those that are being trained to carry on our tradition of excellence. We are extremely interested in obtaining this information and have performed a pilot study to establish our credibility for this effort.

Our pilot study was aimed at obtaining basic demographic data and measuring the perceived stress levels of postdoctoral fellows at the University of Calgary. Within the limitations of our small sample size ( $n = 46$ ), the highlights of our results were that female fellows constitute approximately 30% of the postdoctoral pool, that most postdoctoral fellows are in their early thirties and approximately 50% have families. We also found that stress and dissatisfaction among postdoctoral fellows increases markedly during later years of training. Our most telling finding was that only 15% of postdoctoral fellows surveyed would recommend their career path to others without reservation.

We are currently launching a much larger national study of postdoctoral fellows training in Canada and Canadian postdoctoral fellows training abroad. Through this national study we will obtain valid demographic data on this group, identify sources of stress and determine the methods most often used to cope with this stress. We will

also characterize the training experience obtained by Canadian postdoctoral fellows and examine their outlook for future job prospects. The information obtained in our national study will be of great interest to all levels of the academic hierarchy as well as faculty and academic administrators. Our findings will also be of interest to granting agencies, industry, and government. Upon completion of the study, our results will be published in leading journals.

One of the most challenging parts of this study is simply identifying all eligible postdoctoral fellows. To address this difficulty, we are searching for postdoctoral fellows training in Canada and Canadian postdoctoral fellows training abroad by a letter campaign to Canadian universities and granting agencies, computer news group postings, and an article in the Canadian Federation for Biological Sciences newsletter. Many of these sources have readily supplied us with lists of postdoctoral fellows and our compiled database exceeds one thousand names. If you are currently undertaking postdoctoral training in Canada or are a Canadian citizen or landed immigrant of Canada who is obtaining postdoctoral training abroad and would like to be included in the study, please register in the database and/or request a questionnaire by contacting us by e-mail. Each member of the database will receive a package containing a letter of invitation to participate in the study, a questionnaire, and a database registration card. We emphasize that participation in the study is voluntary and confidential. Therefore, if you receive a package but do not wish to participate in the study or be included in the database, please return the appropriately completed registration card.

Many thanks in advance for your cooperation. ■

(Cheryl Wellington and Caren Helbing are postdoctoral fellows in the Department of Medical Biochemistry at the University of Calgary.)

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## Policy Statement on Performance Indicators

*How should PIs be used?  
What safeguards should be put in place?  
Should they be negotiated or imposed?*

PERFORMANCE INDICATORS ARE VERY much in the eye of the beholder. For some politicians a university's "efficiency" becomes a "throughput at lowest cost," graduating the highest possible percentage of entering students within four years at the lowest cost in professorial salaries and university maintenance. This is unlikely to be what faculty, students, administrators, or parents see as "efficiency" in higher education.

Over the past eighteen months, CAUT's Ad Hoc Committee on Performance Indicators and Accountability has worked to prepare a policy statement on performance indicators. What follows is the first version.

1. Governments in Canada must continue to fund universities and colleges at a level that permits the continued transformation of the system, and the continued development of the country. This means universities and colleges must be in a position to maintain vigorous programmes of education and research in all the arts and sciences, and in the various branches of professional study. The system must become more accessible to persons from all social and geographical origins, more open to women and minorities, and more balanced in its commitments to teaching and research.

2. Certain indicators on accessibility, on openness in governance, on the size and cost of administration, and on new techniques of instruction could provide evidence for informed argument about curriculum, teaching practice, administrative services, the sources of university funding, and the organization of disciplines and professions in the university.

3. Fundamental and applied research about universities and colleges should be done independently, and funded through arm's-length agencies such as the Social Sciences and Humanities Research Council with the support of the Council of Ministers of Education, Canada. Such research could, inter alia, examine the merits and uses of PIs. It is especially important that researchers study the costs and benefits of performance indicators.

Where governments wish to study particular aspects of university or college performance, such research projects must be public from the beginning, undertaken by researchers chosen through peer evaluation and not through patronage, and its results must be made known freely and immediately to the university community and to the general public.

4. Performance Indicators are usually most helpful at the local level, when they are issue-specific and tailored to the mission/mandate of the university or college. Canadian universities and colleges are diverse in size, scope, and activity; system-wide PIs tend to ignore this fact and to produce unreliable results.

5. Local PIs may combine two features, diagnostic and reporting. Diagnostic PIs should be designed to improve teaching and research, not as a device for punishment.

Local PIs should emphasize the activities of education and research, rather than giving primary attention to narrowly defined outputs. Reporting-style PIs will communicate to the many publics served by post-secondary institutions what universities and colleges do, and why.

6. At the local level, PIs should be negotiated between the faculty association and the administration. Academic PIs should additionally be approved by the senate or equivalent senior academic body.

7. Accountability in universities and colleges is impossible unless the governance of these institutions is open and transparent. An important PI in universities and colleges would be a "measure" of how open they are.

8. Performance Indicators should emphasize the activities of teaching and research as well as the role of the university in democratic society. Is it clear how the policies of the province and region have given the university or college its special character or special tasks? Is the wider community fully welcomed? Is the university or college accessible to students from all social classes? Are the main branches of knowledge under study and research? How is quality in teaching and research assessed? What assistance does the institution give to its academic staff to improve teaching and research? Are working conditions such that all students, professors and staff are able to work freely and effectively to achieve their local mission? How is academic freedom defended on the campus? How are the requirements of women and minorities satisfied? How good — and on what criterion — is the library, and how is this measured? How good are the scientific laboratories and computer systems, on what criteria, and how measured? How have these characteristics changed over time and why?

9. There should be full disclosure of the long-term and short-term reasons and motives for each PI, at the moment it is proposed. If PIs are to justify cuts, let that be clear, along with the consequences. If they are a way of changing the university's curriculum, let that be clear. If they are a way of increasing the power of the university's administrative hierarchy, let that be apparent. On the other hand, if PIs can be shown to raise morale of students and teachers, increase public commitment to learning and to public education, help people both in and out of university (including life-long learners) to face change with equanimity, understanding the social impacts of change — then we should know these things, too.

10. There should be full disclosure of the costs and benefits of any PI at the moment it is proposed. The costs should include the time of all those who undertake the project or provide reports or data. PIs cost money to construct and to maintain. Faculty associations should guard against the assumption that the time of faculty is free. They should also guard against uncontrolled

Statement continues... Page 11 ☛

### CAUT's Web Site is up & running!



The web site contains a mixture of information about CAUT and its committees and functions. Selected articles from the Bulletin have been posted, plus a selection of policies, briefs and discussion papers. Links have also been made to connect to other association sites both in Canada and abroad.

Get connected  
<http://www.caut.ca>



# Fraud & Misconduct in Academic Research & Scholarly Activity

*CAUT has been one of the pioneers in the search for reasonable procedures to deal effectively with this rare, but serious situation in the academic environment.*

THERE HAS BEEN MUCH DISCUSSION in higher education circles in recent years about how to deal with fraud and misconduct in academic research. Most commentators agree that the cases are rare but serious, and that universities should have policies in place to deal effectively with such problems. The fallout from the Fabrikant murders at Concordia illustrate how important this is.

CAUT has been one of the pioneers in the search for reasonable procedures. Over the past six years, CAUT has developed and revised a background paper, a policy statement and model legal language for collective agreements in this area.

Essentially CAUT wants to ensure the guilty are punished but only after a fair hearing according to proper procedures. This can best be achieved by drafting an appropriate article in the collective agreements of academic staff. Essentially such an article needs an appropriate definition of what constitutes

fraud and misconduct and a proper grievance and arbitration procedure if those who are accused wish to defend themselves.

The first time a faculty association proposed such an article the response was amazement since such articles normally come from the management. CAUT, however, recognizes that the integrity of all academic research is in jeopardy if fraudulent research is not dealt with effectively. That is why we have suggested that all collective agreements should have such provisions.

CAUT has also worked with the federal research councils in the elaboration of their policies on fraud and research misconduct, and has published its own research.

This is, however, a complicated area. The CAUT background paper gives guidance in such areas as definitions, plagiarism, conflict of interest, falsification, forgery, authorship and the like. The paper was cited in an arbitration decision on fraud at the University of Lethbridge. ■

*As part of CAUT's work in the past six years, a concise definition of what exactly constitutes fraud & misconduct has been developed.*

FRAUD AND MISCONDUCT IN ACADEMIC research and scholarly activity means:

(a) fabrication, falsification, or plagiarism;

(b) failure to recognize by due acknowledgment the substantive contributions of others, including students, or the use of unpublished material of others without permission, or the use of archival materials in violation of the rules of the archival source;

(c) failure to obtain the permission of the author before making significant use in any publication of new information, concepts or data obtained through access to manuscripts or grant applications during the peer review process;

(d) attribution of authorship to persons other than those who have participated sufficiently in the work to take public responsibility for its intellectual content.<sup>1</sup>

(e) submission for publication of articles originally published elsewhere except where it is clearly indicated in the published work that the publication is intended to be a republication;

(f) unauthorized and intentional diversion of the research funds of the university, federal or provincial granting councils or other sponsors of research;

(g) material failure to comply with relevant federal or provincial statutes or regulations for the protection of researchers, human subjects, or the health and safety of the public, or for the welfare of laboratory animals;

(h) material failure to meet other relevant legal requirements that relate to the conduct or reporting of research and scholarly activity;

(i) failure to reveal material conflict of interest to sponsors or to those who commission work, or when asked to undertake reviews of research grant applications or manuscripts for publication, or to test products for sale or for distribution to the public;

(j) failure by those involved in a research project to reveal to the employer any material financial interest in a company that contracts with the employer to undertake research, particularly research involving the company's products or those of its direct competitors, or to provide research-related materials or services. Material financial interest includes ownership, substantial stock holding, a directorship, significant honoraria or consulting fees but does not include routine stock holding in a large publicly traded company. ■

1. Purely formal association with the research project such as the headship of a laboratory or faculty where the head or dean had no direct research involvement may be noted as an acknowledgement but not as authorship. General supervision of the research group is also not sufficient for authorship but may be acknowledged. Technical help, data collection or critical reviews of the manuscript prior to publication may be acknowledged in a separate paragraph.

For the full text of CAUT's policies, see the CAUT web site (<http://www.caut.ca>) or contact CAUT.

## A Skeptical Look

# Value-for-Money Auditing

UNIVERSITIES, OF COURSE, ARE REQUIRED to have their books audited. All universities have their own auditors who conduct an annual audit. The provincial auditor in Ontario thought such audits were not always as thorough as they might be. Nor are the published reports necessarily very informative, a problem which would be solved if the line budget became an open document. In any event, this led the provincial auditor to audit three Ontario universities.

It was a serious error by the Ontario universities to refuse the provincial auditor access to all their accounts on the grounds that not all the money came from the province. It inevitably provoked the government and led to suspicions about the auditing process. It would have been far better simply to have declared the books open to any reasonable inquiry from within or without the university.

We are concerned about the drive of the provincial auditing bureaucracy to transform financial auditing into line control of the operations of the university by the back door, through so-called value-for-money accounting.

What this is supposed to mean is that the auditors will decide not only on the accuracy, the depth and the honesty of the financial accounting but also on whether the programs on which the money is spent represent value-for-money. This seems little more than a presumptuous attempt by the auditors to run the university. The question is, of course, whose values and whose criteria.

Jeffrey Simpson, national columnist for *The Globe and Mail*, had these suggestions in regard to value-for-money accounting for the Association of Universities and Colleges in a recent symposium on accountability:

"My advice to you in this matter is highly unusual for a journalist, all of whose contemporaries revere the country's auditors-general. I am, however, a sceptic of the impact of value-for-money auditing on government. I am not convinced that it brings the benefits everyone supposes. In Ottawa, which I know best, value-for-money auditing has contributed to the entire government apparatus being preoccupied with process. And yet it can hardly be claimed that this proliferation of attention to procedure and accountability...has made government more effective. Indeed, I would argue that it is at least a defensible proposition that government became too big and cumbersome in part because of the excessive requirements of procedure.

"Value-for-money auditors vary far from what has been traditional auditing. In my opinion, value-for-money auditing, whatever its merits, also brings us values-for-money auditing, and the values are those of the auditor...

"So my advice to university and college presidents is to fight by whatever means against allowing auditors to extend their mandate into your territories. This does not mean that accountability is not required; it does mean that you would be doing yourselves, your institutions and ultimately the taxpayers a favour if you did not allow value-for-money auditing, and those who practice it, to invade universities. If they do, the demands of process which have so preoccupied governments will increase dramatically in your institutions."

The major proponents of this approach in Canada are James Cuth and Rodney Dobell. Some of the principles on which they would operate a system are clear from their most recent book<sup>2</sup> — accessibility of students should be curtailed and dressed up as a commitment to excellence, output in relation to students should be measured in how high a salary they get after graduation, and academic self-government and unionization should be curtailed as much as possible.

Value-for-money accounting in our view is simply a bad idea. It is a sophisticated technique for increasing governmental control of the operations of the university and for imposing a particular political agenda. We hope that both provincial governments and universities will reject this approach.

The main organization propagating these views is the Canadian Comprehensive Auditing Foundation, established in 1980, which has identified the universities as its latest target. It considers that one of the key issues "...is the trade-off between access and excellence."<sup>3</sup>

The use of the totem of excellence to deny higher education to qualified Canadian students was a feature of the approach of the federal government and its clients at the National Forum on Post-Secondary Education in Saskatoon in 1987. It is noticeable that the people and organizations represented there rejected that approach and demanded both excellence and accessibility. ■

1. Jeffrey Simpson, *Keynote address: Accountability in Higher Education*, General meeting of the Association of Universities and Colleges of Canada, Vancouver, 4 March 1992, pp. 3-4.

2. See especially ch.1: "Accountability and Autonomy in Canada's University Sector: Business as Usual or the Lull before the Storm" in Cuth and Dobell.

3. *Task Force on University Accountability: Progress Report and Issues Paper*, Ontario Task Force on University Accountability, Toronto, June 1992.

The above article is taken from *Governance & Accountability: The Report of the Independent Study Group on University Governance*, CAUT, Ottawa, 1993.

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## A Primer on Conflict of Interest

**"A** CONFLICT OF INTEREST OCCURS when a person has a duty to fairly decide or vote on an issue, and there is a reasonable presumption that the person stands to be benefited or harmed from a certain resolution of the issue."

In a Policy Statement on Conflict of Interest, adopted in 1991, CAUT urged universities and colleges to ensure that they had in place policies applicable to all members of the academic community including the faculty, the management, and the Board of Governors for dealing with these types of problems.

Generally speaking CAUT takes the view that, where there are material conflicts of interest, individuals should withdraw from the discussion and the vote but are not required to give up their position. The exception to this are members of the Board of Governors who have ongoing substantial business interests with the university or college. They should not sit on the board. CAUT does not think the university's law firm should sit on the board, nor should representatives of its major insurance or pension supplier and the like.

Faculty members involved in any companies, including those of a research nature,

which have contracts with the university should ensure that these arrangements are known to the university administration and they should follow the ethical principles which are discussed in another CAUT document, *Information Paper on University/Business Relationships in Research and Development*.

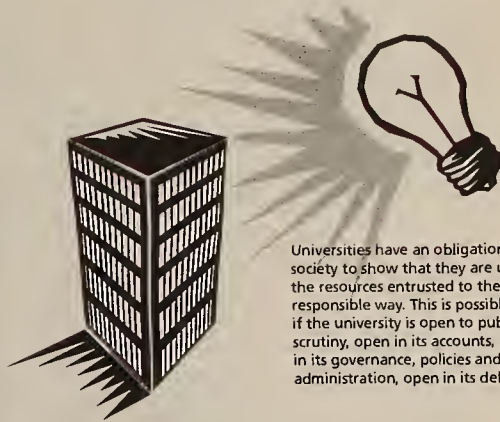
Faculty members elected to Boards of Governors should feel free to discuss and vote on issues of academic policy since that is the reason for their election. However, they should not participate in discussions or vote on matters which affect them personally.

The president should declare all of his or her business interests in an annual public statement to the board. Neither the president nor any senior administrator with the power to recommend contracts should be owners, partners, or have a substantial interest in any company that does business with the university. That should not preclude the president from accepting directorships in companies that do not do business with his or her institution since such directorships can be useful for the purposes of fund raising.

CAUT has also developed an information paper on conflict of interest which discusses and defines the notion of what is and what is not a conflict of interest. ■

## Keep the Vision, But Let In the Light

*Openness must ... be the normal condition of discourse in the university.*



Universities have an obligation to society to show that they are using the resources entrusted to them in a responsible way. This is possible only if the university is open to public scrutiny, open in its accounts, open in its governance, policies and administration, open in its debates.

**I**N 1995 CAUT ADOPTED A POLICY Statement on Openness and Transparency in Post-secondary Education. It noted that: "Persons and institutions can be held accountable only if one can see what they have done: openness is necessary for the discovery of error, for its correction, and for the assignment of responsibility."

"Moreover if universities are to be self-governing, then they have a reciprocal obligation to society to show that they are using the resources entrusted to them in a responsible way. This is possible only if the university is open to public scrutiny, open in its accounts, open in its governance, policies and administration, open in its debates."

The statement then goes on in some detail to argue that meetings of senior academic bodies and Boards of Governors should normally be open. As well, meetings of Senate budget and planning committees should be open, the line budget should be open, and major planning exercises should be open from their inception. Archives policies should be as open as possible and, in any event, no more restrictive than the federal government in regard to its archives.

The document suggests that salaries of all senior administrators and all academic staff be public. So should all collective agreements and the academic curriculum vitae of senior administrators and academic staff as submitted by them to the university or college. It recommends that arbitrations under collective agreements normally be open although it recognizes that in certain limited circumstances they may be closed.

Neither the university nor the college nor the academic staff should engage in secret research, except where contracts require a limited waiting time in order to secure patent protection. The increasing involvement of business and governments in the research work of the university is putting a considerable strain on this principle.

Finally the statement urges a much greater degree of openness on the part of both the federal and the provincial governments. ■

For the full text of the statement, see the CAUT web site (<http://www.caut.ca>) or contact CAUT.

## Policy Statement on Performance Indicators

From Page 9

expenditures on PIs, leading to ever-increasing bureaucracy and to the dead hand of government on the way teaching, research, and community service is conducted. The question should always be asked whether the funds would be better used solving the problem rather than producing a report (and in particular, a statistical report) about it.

11. The choice of indicators and PIs should be driven by policy — not the other way round. The fact that something can be measured should not mean that we necessarily measure it.

12. Performance Indicators on the satisfaction of graduating students should be sophisticated and nuanced. If the institution decides to use exit surveys, it should also administer surveys at five, ten, and twenty-five years after graduation. It should be also be clear what these instruments are measuring. If the university or college surveys specific groups of graduates or others, these, too, should be nuanced. If business leaders are asked for opinions, so should labour leaders and community groups. If newspaper editors or owners are asked, so should working journalists. Overall the university or college should recall that the opinions revealed by surveys may have little to do with the facts as they are. Surveys may yet be interesting and useful, but should not be assumed to reveal either the truth of public opinion, or the truth of an institution's health.

The public interest should not be defined solely by the demands of individual

groups or by a set of "clients". The public interest is defined by democratic principle, by historical development, and by exigent moral stands such as respect for persons. It cannot and should not be defined by temporary waves of client demand.

13. Faculty associations should guard against the use of PIs that deliberately or unintentionally promote the separation of teaching and research.

14. Faculty associations should ensure the academic work of university teachers and researchers is always assessed by peers and that this is done fairly. [See Canadian Association of University Teachers, *What is Fair?*]

15. Faculty associations should guard against the culture of compliance that can easily arise from mindless application of PIs. Universities and colleges are organized to push back the frontiers of knowledge in teaching and research. PIs can encourage an arrangement where people do the minimum and punch the clock, albeit metaphorically, just to get by. Excellence is not produced by rules and bureaucracy but by first-class professionals who have the freedom and the time to teach well and to undertake first-class research. ■

The CAUT governing Council will be giving a first reading to this proposed Policy Statement in May with the intention of making a final decision at its meeting in November. Any comments or suggestions for improvement should be sent to the Executive Director at CAUT. The full text includes a foreword which we did not have space to publish but which can be found on the CAUT web site (<http://www.caut.ca>).





## Governments, Too, Are Accountable

*Governments give the impression that they have no interest in hearing anything other than that which supports their conventional wisdom.*

**G**OVERNMENTS SHOULD BE ACCOUNTABLE for their higher education policies but rarely is this the case. Provincial governments are accountable to their electorates, but provincial elections do not often feature higher education as an issue. Nevertheless major decisions on higher education that are both expensive and which could change the system in a dramatic way must ultimately be made by governments.

These decisions might include the opening or closing of universities, expanding or contracting the number of expensive professional schools such as medicine or engineering, pooling resources on a major scale within the province or with other provinces, substantially increasing or decreasing the intake of students.

This means that truly responsible governments should ensure their decisions regarding post-secondary education are fully discussed with the stakeholders and other interested parties before adoption, and then debated in public, particularly if they are

contentious. At the moment this normally takes the form of hearings before a commission appointed by the government. The CAUT Policy Statement on Openness and Transparency states:

"Commissions nominated entirely or largely by the government lack credibility since the perception of reasonable persons is likely to be that the government would appoint those who are going to recommend what the government has decided to do in the first place, whether this is actually the case or not. The best way to ensure that there are independent commissioners is to allow the stakeholders in question either directly to nominate some of the commissioners or to create a process by which mutually agreeable commissioners are chosen. Individual commissioners should always have the right to make a public minority report."

The report of the Independent Study Group on University Governance commissioned by CAUT in 1990 supported public consultation. However, it noted that, "the

word consultation has fallen into disrepute because it all too frequently means *pro forma* hearings over plans which the provincial civil service has already decided." An example of this was the original terms of reference of the Johnson Commission in Saskatchewan where the questions posed to the commission appeared to presuppose the answers already arrived at by the bureaucracy.

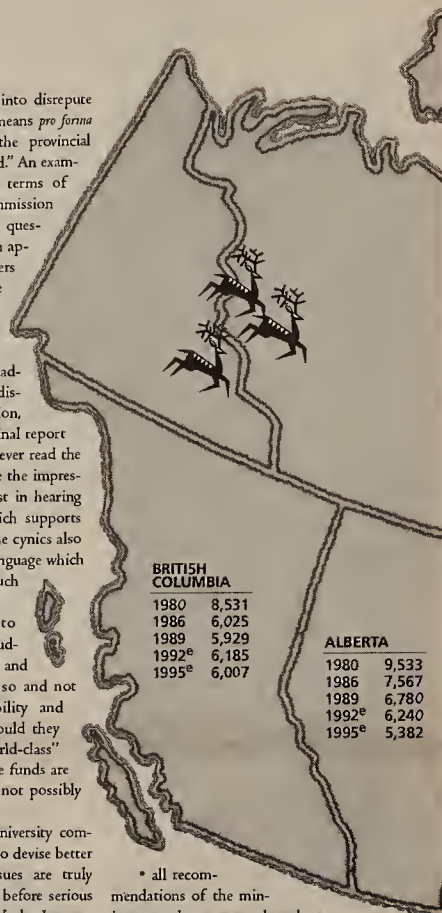
Other tactics which confirm cynicism about the process are impossibly short deadlines, a half-hour hearing to discuss a very complicated question, and the clear evidence in the final report that the commissioners have never read the briefs. Many governments give the impression that they have no interest in hearing anything other than that which supports their conventional wisdom. The cynics also note the prostitution of the language which sometimes takes place in such political debate.

If governments want to reduce university and college budgets, downgrade accessibility and cut research, they should say so and not blather on about accountability and other smoke screens. Nor should they pretend that programs are "world-class" when they are not or when the funds are being cut so that they could not possibly be so.

All this means that the university community itself is going to have to devise better means of ensuring these issues are truly debated by the general public before serious decisions are made. Cable TV, the Internet and the World Wide Web may be some of the ways to offset the power of the provincial bureaucracy. Town meetings and other such gatherings may be another way. The university also has to have some alternatives; the alternative budget movement is one way to do this.

Another way to ensure governmental accountability is through openness and transparency. CAUT recommends that all government departments responsible for higher education should ensure that:

- the existence of all internal policy and financial studies are known to the stakeholders before they are begun, including the names of researchers, and the projected costs; and, when the studies are completed, the results and final costs are made known to the stakeholders;
- the names, terms of reference, preliminary and final reports of consultants are open including their files which should be available for researchers as soon as the final report is submitted;
- all correspondence from third parties with the minister and the civil servants regarding post-secondary policy or finances as well as the responses be open upon request;
- the existence of all contract research including the names of the principal investigators and co-investigators, the title and explanation of the project, the costs and the final report be open to public; and



## Academic Alarm

*Ontario universities and colleges must lead the search for solutions as the government proposes big overhaul.*

**O**NTARIO UNIVERSITIES AND COLLEGES are facing a radical overhaul by a Conservative government motivated as much by anti-intellectualism as a thirst for thrift. The institutions must prepare for an uncertain future with creativity and boldness.

During last spring's election campaign, Tory leader Mike Harris revealed his contempt for scholarship by suggesting he would abolish tenure for university professors, to make them function more like business people. Harris's comment betrayed his ignorance about the importance of protecting academic freedom, not least from meddling by governments such as his.

The Common Sense Revolution document offers more cause for alarm. It states that universities and colleges "have suffered from government's failure to set priorities" — as though governments could (or even should) predict and fill the province's future educational needs.

The document goes on to lament a "lack of funding (that) has resulted in lower quality service to students." The solution? Freeze provincial spending but permit tuition fee increases and some unspecified "private sector involvement" in the student loans program.

Since then, things have gotten only worse. The \$2.6 billion in provincial transfers to post-secondary institutions last year will decline by \$400 million this year. And more cuts are likely as a reduction in federal subsidies for universities and colleges kicks in later this year.

The Tories have promised public consultations to define new goals for higher learning. And indeed, versions of a discussion paper (now said to be in its 13th draft) have been floating around Queen's Park, and

former premier Bill Davis is being rumored to head a new task force on post-secondary education.

Whatever form it takes, the renewal exercise should be guided by three core principles:

One, higher education is a right, not a privilege, in a modern industrialized society. As the minimum requirement for most decent jobs these days, post-secondary education must remain affordable and accessible.

Two, universities must resist pressure from government and business to crank out perfect little workers. No one can predict the needs of the workforce several years from now, least of all an institution traditionally slow to change.

Rather, the university should teach independent thought, research skills and other building blocks of a civilized society, and leave businesses to meet their own training needs.

And third, budget cuts must come from administrative savings, not the lecture halls. Ontario could usefully look to Nova Scotia, where universities have found substantial savings through mergers and consortia to share such functions as plant operations and student registration. None feel they have betrayed their principles or autonomy.

In the face of the Tory government's powerful will to cut, student groups and organizations representing universities and colleges must lead a constructive and united search for solutions.

After all, generating new ideas and leading public debate are time-honored academic traditions. ■

Editorial, *The Ottawa Citizen*, April 10, 1996. Reprinted with permission.



## Overview of the Federal Government's Track Record for PSE & Research

If governments want to reduce university and college budgets, downgrade accessibility and cut research, they should say so and not blather on about accountability and other smoke screens. Nor should they pretend that programs are "world-class" when they are not or when the funds are being cut so that they could not possibly be so.

### OPERATING GRANTS TO UNIVERSITIES PER FTE STUDENT

The accompanying map of Canada shows the interprovincial comparisons of operating grants to universities paid per FTE student for selected years over the past decade and a half. All figures are listed in constant 1986 dollars.

Note: e = estimate

Source: The Financial Position of Universities in Ontario 1995, Council of Ontario Universities, Table 16. Amounts in constant dollars calculated by CAUT.

#### CANADA AS A WHOLE

1980	7,911
1986	6,147
1989	6,276
1992 <sup>e</sup>	6,004
1995 <sup>e</sup>	5,530

#### MANITOBA

1980	7,821
1986	6,326
1989	6,583
1992 <sup>e</sup>	6,015
1995 <sup>e</sup>	5,708

#### SASK.

1980	8,357
1986	6,965
1989	6,455
1992 <sup>e</sup>	5,966
1995 <sup>e</sup>	5,282

#### ONTARIO

1980	6,787
1986	5,677
1989	5,774
1992 <sup>e</sup>	5,507
1995 <sup>e</sup>	4,895

#### QUEBEC

1980	8,687
1986	6,183
1989	6,758
1992 <sup>e</sup>	6,694
1995 <sup>e</sup>	6,371

#### NFLD.

1980	9,826
1986	7,043
1989	7,580
1992 <sup>e</sup>	6,649
1995 <sup>e</sup>	6,881

#### P.E.I.

1980	6,961
1986	6,099
1989	7,155
1992 <sup>e</sup>	6,347
1995 <sup>e</sup>	5,801

#### N.S.

1980	6,626
1986	5,768
1989	5,779
1992 <sup>e</sup>	4,848
1995 <sup>e</sup>	4,281

#### N.B.

1980	7,795
1986	6,020
1989	6,136
1992 <sup>e</sup>	5,438
1995 <sup>e</sup>	4,924

### GERD

as a percentage of GDP (1993)

1. Sweden <sup>a</sup>	3.26
2. Japan <sup>b</sup>	2.94
3. U.S.A.	2.66
4. Germany <sup>c</sup>	2.48
5. France	2.45
6. Finland	2.22
7. U.K.	2.19
8. Norway	1.94
9. Netherlands	1.89
10. Denmark	1.80
11. Canada	1.58
12. Austria	1.52

#### Notes:

GERD = Gross Domestic Expenditures on R&D  
GDP = Gross Domestic Product

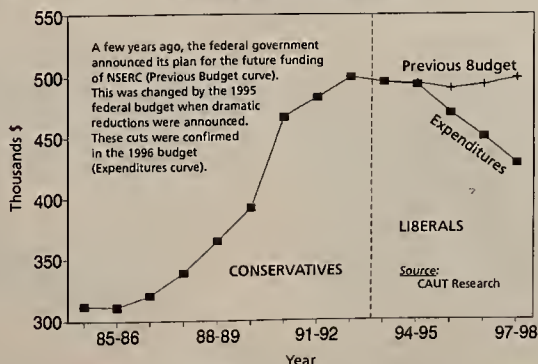
a = underestimated or based on underestimated data

b = overestimated or based on overestimated data

c = national estimate or projection adjusted, if necessary, by the Secretariat to meet OECD norms

Source: OECD, Main Science & Technology Indicators, 1995

### TOTAL NSERC EXPENDITURES Including Centres of Excellence



### TOTAL RESEARCHERS per 1,000 labour force (1991)

1. Japan <sup>b</sup>	9.2
2. U.S.A.	7.6
3. Norway	6.3
4. Germany <sup>c</sup>	6.1
5. Sweden <sup>a</sup>	5.9
6. Finland	5.5
7. France	5.2
8. Canada	4.7
9. U.K.	4.6
10. Denmark	4.1
11. Netherlands	-
12. Austria	-

### CASH EPF FOR PSE PER STUDENT

Year	Cash EPF for PSE (Constant 1986\$)	Total Full Time Students	Cash per Full Time Student (Constant 1986\$)
1977-78	1,938,750,000	374,185	5,181
1980-81	2,305,729,000	382,617	6,026
1983-84	2,289,447,000	450,508	5,082
1986-87	2,238,747,000	475,414	4,709
1989-90	1,981,477,000	515,025	3,847
1992-93	1,937,488,000	569,480	3,402
1995-96	1,749,385,000	574,304 <sup>e</sup>	3,046 <sup>e</sup>

Note: e = estimate

Source: CAUT Research



# Accountability through the Accreditation of Universities & Colleges

ACCOUNTABILITY IS VERY MUCH THE *vogue* in discussion about universities and colleges in many western industrialized countries. Countries such as the United Kingdom, France, Holland and the United States have all put in place varying systems to try to ensure the accountability of their higher education institutions. Accreditation is one possible tool for doing this.

CAUT can do a service to the university community by proposing methods of accountability and accreditation which can reasonably satisfy the general public and all levels of government concerning the quality of operations of each institution without burdening everyone with irrational and counterproductive bureaucratic structures. We can suggest the difference between fads allegedly derived from business administration, and effective accountability and planning which may be less glamorous but more rational. CAUT can also point out to the public that some schemes of accountability, while being touted as making the universities more responsive, are, in fact, designed to accelerate the growth of bureaucratic and political control of the universities and colleges and mask the impact of chronic and deliberate underfunding.

Nothing illustrates this better than the situation in the United Kingdom. Thatcherism, while ostensibly a doctrine of individualism, has, in fact, caused a dramatic increase in central power whether by the destruction of local government or by increased control of the university sector. In the universities this has produced a new level of bureaucracy largely devoted to dealing with frequent, mandated reviews of teaching and research. It has also produced an ongoing war between the vice-chancellors and the central government which has lasted about a decade, involved the creation at great cost of competing structures of accountability, and only now seems to have resulted in an unstable peace treaty.

Can we simply say no? This is not a politically viable route. Governments will paint academic staff as a privileged group that refuses to be accountable for the large sums of money spent on universities and colleges and that wishes to hush things up when one of their colleagues seriously transgresses professional norms. The medical doctors have not

done a great job of defending themselves in somewhat similar circumstances. We should learn from their failures and their successes. We have to be more politically astute than those who really think that the universities and colleges can be better run by bureaucrats, politicians or businessmen.

Without in any way arguing for a system of national standards or a national curriculum, a properly constituted national accreditation could help ensure national equivalence and accessibility. It is a useful counter to federal cuts in the funding of post-secondary education which threaten to balkanize the system into haves and have-nots. It will also help us to deal with quasi-universities, which have begun to appear, in the sense that accreditation will focus discussion on what actually constitutes a university.

In the early nineties, CAUT appointed the independent study group on university governance and accountability. They reported in 1993 and made a series of recommendations concerning university governance, openness, and accountability through accreditation.<sup>1</sup>

What did ISGUG mean by accreditation? It meant a national mechanism whereby universities and colleges could be held accountable for the work undertaken by them as set out in their mission statements, academic plans and other such documents. This approach would recognize that there is a major difference between institutions and would hold them accountable only for the educational goals that they themselves had developed. It also meant a process by which the entire operations of a university or college would be reviewed, not particular faculties and professions, in the light of historic academic standards.

ISGUG suggests a model that is a mix of experience from the United States and from Europe. It recommends one that derives from the American experience of accreditation in the sense that accreditation in the United States involves an examination of the individual institution in accordance with its local mission statement but covering the whole range of activities that are normally involved in university work — teaching, research, the state of libraries and scientific equipment, student services, the quality of the adminis-

tration, the state of academic freedom, and the diversity of the student body. It differs from the American model in suggesting that accreditation should be national, open, and be governed by a body which, while having a substantial representation of the stakeholders, should also have a reasonable representation from governments and from the general public. Accreditation has run into political difficulties in the United States precisely because their system is not particularly open and does not have reasonable representation from governments or the general public.

The Report follows the European model in the sense that it recommends a national body to do this work. It does not say explicitly whether this body should be voluntary but, in my opinion, that is the only way it could possibly work. That means that those who object to any pan-Canadian initiatives in this area (such as FQPPU) can simply opt out without denying to everyone else the possibility of creating such a structure.

The Report suggests the following reasons for such a national system, namely:

- that local systems of accountability, although they should be primary, are unlikely to deal effectively with the scepticism to be found in the media and the general public about self-policing professionals.

- that a system of accreditation that takes into account the whole institution will ensure that all parts of the university, not just those with professional accreditors, are covered. This is particularly important since professional accreditation is frequently used as a lever for more money.

- that the post-secondary system is now much larger and much less homogeneous. The rise of university colleges in British Columbia is already influencing other provinces and that government is also proposing new forms of universities. The abolition of the binary divide in the United Kingdom and in Australia will have an effect on Canadian policy makers. Privatization may lead to yet other structures. Bible colleges and businesses want to run universities. There are now hundreds of private colleges in British Columbia run on the principle of caveat emptor. What will ensure quality?

- that balkanization through ten different accrediting standards in a country with a

population and a post-secondary education sector as small as Canada's defies common sense, and flies in the face of the needs of the country. Canada now faces the reality of international competition and competitiveness in all walks of life including post-secondary education.

- that accreditation systems created by provincial governments are likely to be staffed or structured so that the key financial decisions of the provincial government are automatically validated. The more provincial governments cut budgets for post-secondary education, the more they announce that their universities and colleges are world-class. Because a national body would involve more constituencies from all across the country, it would be more difficult for one government to subvert the process.

- free trade with the United States has already meant an increased number of American institutions operating in Canada. Canada can cope with this development only by creating a system of independent accreditation for all institutions whether Canadian or American.

- national accreditation would make it easier for Canada to compete with the United States and the Europeans for foreign students, since there would be one address to find out about the standards of various institutions.

ISGUG proposed a basically self-governing arrangement. Without any such arrangement, it is likely that provincial governments will create their own quality assessment structures which sooner or later are likely to fall under the control of the provincial ministry. ISGUG also noted that its proposal would allow the federal government as well as the CMEC to provide funding without creating a federal institution or a federal educational policy. ■

1. Ernst Benjamin, Guy Bourgeault, and Ken McGovern, *Governance & Accountability: The Report of the Independent Study Group on University Governance*, CAUT, Ottawa, 1993.

The CAUT governing Council will be discussing the question of accreditation at its May and November meetings. The preceding background document was prepared by CAUT President Dr. Joyce Lorimer.

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In Winnipeg

## UMFA Stands by Refugee Students

By Tom Faulkner

**L**AST FALL WHEN MEMBERS OF the University of Manitoba Faculty Association (UMFA) were scraping their coffers to cover strike pay, they were also paying several hundred dollars per month to support a student refugee from political disorder in Burma. That's not chicken feed when you're giving up your own pay in order to walk a picket line.

This is the second year in a row that UMFA has made it possible for a Burmese student to come to Canada under the Refugee Student Program of the World University Service of Canada (WUSC). Last year it was Andrew Tun; this year it was Kyi Lwin.

Without the WUSC program they would still be in refugee camps overseas, barely getting by — or worse. Thanks to the WUSC program and its generous supporters, they receive a full year of support as students at a Canadian university.

The support is solid and efficient. Manitoba has been bringing in WUSC refugee students for over ten years from troubled countries all over the world, and in every case the students have been successful in establishing themselves after the first 12 months of full support. But it is not just money that the students require.

Kyi Lwin arrived in Winnipeg from Burma in December. Try to imagine what it feels like to fly from tropical Burma to the corner of Portage and Main at -40 degrees Celsius! The WUSC local committee was there to provide clothing and advice, and reassurance that "this too shall pass." (They were not believed, but the clothing was much appreciated.)

Andrew Tun faced a different problem in that there were very few Burmese in Winnipeg when he arrived. But now there is a small Burmese community in the city made up of other refugees brought in under a government-sponsored program. Andrew and Kyi Lwin have strong ties to both the recently arrived Burmese and to students who have lived in Manitoba all

their lives.

The day-to-day support of students on the WUSC local committee is crucial to helping Andrew Tun and Kyi Lwin settle into the Canadian context, showing them how to meet friends in residence and how to understand the individualistic style of students raised in Canada.

Kyi Lwin plays chess, but whom do you play when you are a complete stranger? The WUSC local committee is there to help with introductions.

Need a part-time job? A committee member works in a downtown restaurant where a student newly arrived from Burma might have a shot at becoming a dishwasher.

Not happy with your TOEFL scores? Clueless about what classes to take? The committee members are there to help you practice your English and to take you to look over a few classes.

The refugee students in turn become involved in the work of the WUSC local committee, helping to raise money through a 24-hour read-a-thon. That cash helps to cover one-time costs such as airfare and head tax.

In the meantime the steady and substantial annual grant from the faculty association helps to attract donations from individuals and to ensure that the university administration continues to waive tuition and residence costs. In times when everything is being cut back, regular support from UMFA is crucial to continuing the Refugee Student Program.

Backing a refugee student's only chance for higher education and striking in defence of higher education: UMFA deserves our praise for finding the resources to do both. ■

(Tom Faulkner is a professor of Comparative Religion at Dalhousie University.)

If you are interested in encouraging your faculty association to support a WUSC student refugee, contact your association officers, or write to: Tom Faulkner, CAUT/WUSC Liaison Officer, c/o Department of Comparative Religion, Dalhousie University, Halifax, Nova Scotia B3H 3J5; e-mail: tom@is.dal.ca.

Pen Canada & International Pen

## Fighting for Freedom of Expression Worldwide

By Marian Botsford Fraser

**P**EN CANADA, AS A MEMBER OF International PEN, the worldwide organization of writers, fights for freedom of expression. Our work takes the form of adopting imprisoned or threatened writers as honorary members and working specifically on their behalf. In forcing repressive regimes and our own government to acknowledge the plight of individuals, we hope to highlight the significance of freedom of expression as one of the most fundamental human rights. When freedom of expression is denied to the citizens of a state, other human rights abuses flourish unabated, in a terrified silence.

Twenty-four hours last November dramatize the work of PEN Canada. On November 9, we heard Prime Minister Jean Chrétien finally speak out, at the Commonwealth conference in New Zealand, on behalf of Nigerian writer Ken Saro-Wiwa, whose death sentence had been ratified a few days before. Ken Saro-Wiwa was imprisoned in May 1994; in October 1994, he became one of PEN Canada's cases, and subsequently was honoured at the Harbourfront International Writers Festival and at the PEN Canada annual benefit. His son, Ken Wiwa, spoke at that event, and PEN took him to Ottawa to lobby on his father's behalf. In the fall of 1995, it seemed that the name of Ken Saro-Wiwa was on the lips of journalists, activists, and government leaders everywhere. People who had never heard of Ogoniland now knew of Saro-Wiwa's trial. And finally, Commonwealth leaders dared to speak his name, in a strongly worded plea for clemency.

Hours later, we heard that Saro-Wiwa, and eight other Ogoni activists, had been executed.

The names of Ken Saro-Wiwa, Wei Jingsheng, Salman Rushdie, Aung San Suu Kyi and Taslima Nasrin have become common international currency. They are all writers; their fame derives not simply from their writing but from their persecution. And they form the tip of a most insidious, shifting pyramid.

Just as there appears to be a softening of the Italian government's *favore* against novelist Salman Rushdie, just as Burmese Nobel Peace Laureate Aung San Suu Kyi is released from house arrest, a shot rings out or a prison door slams shut somewhere else in the world. The Chinese dissident, Wei Jingsheng, for example, has already spent sixteen years in prison for advocating human rights; he was freed in 1993 after international intervention, and then last December was sentenced to another fourteen years.

It is a terrible irony that notoriety offers an uneasy (and in the case of Saro-Wiwa, short-lived) protection for these writers; if their names were not in international circulation, they might easily be quietly killed. They are visible, even familiar but not free. They are also symbols of the persecution of many other writers who are not well-known.

Consider the sheer numbers of writers imprisoned or killed, simply for what they have said or written. In Turkey, International PEN is investigating 250 cases of persecuted or executed journalists and writers. In Algeria, at least 30 writers have been killed in an escalating civil war. Egypt has been in an official "state of emergency" for 27 years; this results in the volatile

public dynamic in which, for instance, Nobel Laureate for Literature Naguib Mahfouz was stabbed by Muslim extremists. In Tibet and Vietnam, Buddhist monks are declared enemies of the state.

But move even further into the chilling depths of censorship. Censorship is the weapon of first resort for governments in uncertain political situations. Not only are famous writers and bold journalists in danger, at every level of public and private life, the freedoms to think, read or write are denied. Nothing is reported, criticized, questioned. The example of imprisonment, torture or execution imposes a further silence. Fear and ignorance prevail.

The name of Ken Saro-Wiwa has dropped from the public consciousness. What now for the Ogoni people? What of Wei Jingsheng, whose case PEN Canada is currently asking the Canadian government to intervene in. We should not blink and shrug off the celebrity of such writers. We have to go back, over and over again, as we used to do with Alexander Solzhenitsyn in the Soviet Union and pick away at the insidious framework of censorship, by starting with the names we know.

Had the Prime Minister of Canada and other leaders spoken the name of Ken Saro-Wiwa just a few days or weeks earlier, his life might have been spared. We must redouble our efforts to ensure that similar tragedies do not occur elsewhere in the world. ■

(Marian Botsford Fraser is the past president of PEN Canada.)

For information on how to join PEN Canada please contact: PEN Canada, 24 Ryerson Avenue, Suite 309, Toronto ON M5T 2P3; Telephone: 416-703-8448; Fax: 416-703-3870; E-mail: pencan@webape.org.

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# Management Manual Proves Aimless

## Once Upon a Campus: Lessons for Improving Quality & Productivity in Higher Education

Daniel Seymour, *American Council on Education/Oryx Press, Phoenix, 1995.* 184 pp. \$24.95 us.

By William Bruneau  
University of British Columbia

THIS BOOK IS ABOUT UNIVERSITY administrators and the "improvement" of university management in the United States. The book is not, in the end, about higher education at all.

Each of Seymour's 14 chapters (entitled Lesson 1, 2, and so on), begins with a story that illustrates how simple are the answers to the problems of higher education. A

Chinese-speaking woman can't find someone to waive the prerequisite (ability to speak Chinese) for Asian Studies 229 and wanders endlessly from building to building. A young man goes through nine separate administrative steps so he can write a "challenge credit" examination in mathematics. There's a bottleneck (Lesson 4, as it happens) at the University of Xi; it takes seven signatures to approve a research grant application. By contrast, there's the story of the hard-working mail-room people who willingly put in extra hours after a disastrous fire.

Seymour says he hopes his book will be an "audit tool" and/or a "planning tool" that will help to solve these sorts of problems and remove obstacles to opportunity, and make American higher education productive again.

He thinks we will want to listen to him, if only because American industrial leaders want things from higher education that they are not getting (p. ix). This is all the political analysis we get in *Once Upon a Campus*.

Seymour's answer to the "crisis" is the application of good old-fashioned systems theory. First, Seymour says, set your direction (pp. 3-26). There is just one sensible direction — performance improvement. Next, design "processes" of management that are closely tied to that direction. By "processes," Seymour means (p. xix) course scheduling, advising, grant writing and administration, contract letting, and the like.

Be sure to build in feedback loops and performance measures so you can tell bad from good processes (good ones will ensure all activities in the organization are consistent with the agreed direction, and attendant goals and objectives). The feedback loops and the performance measures go together; a "productive" university is, by definition one where the feedback loops are full of performance measures, and the university administration is changing fast, all the time, in light of those measures (pp. 75-85).

These three components work in a tight and effective loop only if there are "enablers." Enablers are catalysts, "such as leadership and problem-solving approaches, [that] have a critical influence on the rate at which the organization creates the knowledge required to alter its practices." Enablers take performance measures in hand, and then make change happen. If there's a high dropout rate, an enabler will say, "Why shouldn't everyone pass, eventually?" Presto, the curriculum changes to allow what the public schools call "continuous progress" and "mastery learning."

Finally, Seymour suggests, the system's workability depends on personal involvement, "the degree to which individuals exercise control over their own work environment." If we applied these five elements, public support would grow, and industrialists would grow to love higher education.

Colleagues in departments of management will instantly recognize the sources of Seymour's commandments: Herbert Simon (problem solving), Frederick Taylor (scientific management), Forrester

and Laszlo (systems theory), and their descendants in the Management By Objectives and Total Quality Management movements. Although research on the "learning organization" is tremendously popular in North American business schools, Seymour's sources are no longer popular, or even in good repute. After the rise to popularity of these various sources and movements, it was only a matter of years or months before researchers and practitioners noticed the artificiality of this abstract research on the very concrete business of...business. Human beings have histories, come from well-defined social structures, and thus have attitudes and practices which will decide the fate of organizations. By comparison, a feedback loop is a minor consideration. Seymour is asking us, then, to jump on a bandwagon that passed several years ago.

Seymour's volume, although about administration, makes useful points about the teaching and working lives of professors and instructors. On feedback, for example, Seymour tells the awful story of a young professor (pp. 109ff) who never really knows where he's at in the tenure "process," who knows darned well he should be working with undergraduates, but is turned away from that sensible goal by the research imperatives and Performance Indicators of his institution.

Seymour is right, too, to say that we professors have a problem with our customers and clients.

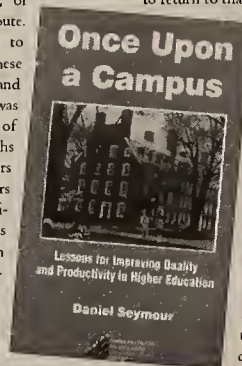
We like to be in charge, and so don't want to listen to our customers (whether students or future employers). We were customers ourselves, once, and have no wish to return to that status. Our behavior shows that

we work hardest to please journal editors and senior professors (pp. 18-22), not our true "end users." But Seymour goes to an extreme, saying that only end users matter.

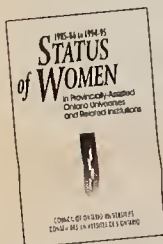
On another front, Seymour is at least partly right to say that the excellence of an institution is defined "by its ability to meet its stated aim." The difficulty is, of course, to decide what the aim should be, and who should set that aim. I think the aim should be to do whatever is required to make the university a community of open inquiry in the fundamental and applied disciplines. This means decisions about promotion and tenure, budget and curriculum, would be arrived at openly. It's just not possible to be secretive in governance, yet perfectly open in teaching and research. ■

(William Bruneau is Chair of the CAUT Ad Hoc Committee on Performance Indicators and Accountability.)

CAUT Past-President Alan Andrews is the Bookshelf page editor; facsimile: (613) 820-2417; email: andrews@ac.dca.ca.



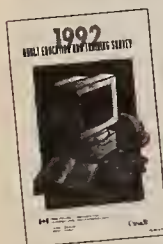
## Quick Reviews



### Status of Women in Provincially-Assisted Ontario Universities & Related Institutions 1985-86 to 1994-95

Council of Ontario Universities,  
Toronto, 1996; 57 pp.

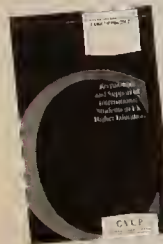
The Committee on the Status of Women of the Council of Ontario Universities has received this statistical report which was produced for many years by the Ontario Ministry of Colleges and Universities. It provides a wide variety of statistical information on students, degrees awarded, full-time faculty, faculty-student comparisons, and full-time academic staff with many tables and charts.



### Adult Education & Training Survey 1992

Human Resources Development Canada,  
Ottawa, 1995; 105 pp.

This report, which is available in both English and French, collected information on all structured employer and non-employer sponsored education and training activities, regardless of level, content or method, pursued by persons aged 17 or over. Such training is fairly extensive, and about two-thirds of it is supported by employers. The survey also shows that the higher the income, the higher the participation rate. This suggests that special mechanisms are needed to reach those with less education and less income. The slowness of publication also suggests that it might be good public policy to put all the data collected on line for other researchers rather than waiting to make it available until the report is finally written and published.



### Recruitment & Support of International Students in U.K. Higher Education

Committee of Vice-Chancellors and Principals  
of the Universities of the United Kingdom,  
London, 1995; 15 pp.

This is a brief statement by the U.K. Vice-Chancellors on the subject. CAUT adopted a Charter for International Students in 1990, and CBIE has also been active in this field. Perhaps it is time that the CMEC, the federal Department of Immigration, and the stakeholders in this country got together and produced a formal official policy to ensure the proper treatment of international students.

## EDUCATION 3000 DISTINCT PEOPLES

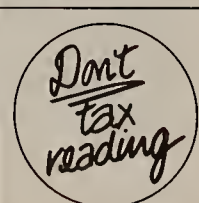
To solve the constitutional crisis in Canada, we need the will to do it. The break up forces exist mainly as a result of major global events (in Europe, the Middle East, South Africa, free trades, etc.), and in fact are less due to the past history of French and English Canada.

The resulting global change of forces in the last decade, along with the accumulated problems in America, requires certain reflections into Canada's position in the world. The notion of French people as the only "distinct people" in Canada's constitution is an absolute concept and will not properly address the global events. We need to view "distinctiveness" from a relativistic point of view. This makes the concept dynamic. Besides French people, the other distinct people are Aboriginal, visible minorities and particularly the people of Canada who are followers of minority religions i.e. less than 30 million followers worldwide.

Based on two distinct peoples, we should be able to design powers in order to guarantee the equality of all citizens in Canada. We should be able to formally recognize the Aboriginal people of Canada and other fundamental issues in our democracy (relative to the total balance of forces).

Be a member of Education 3000, contact: Dr. Mehran Basti, 916 - 22 Bellevue Rd., Winnipeg, MB R2M 1S5.

A VISION OF CANADA



## Accountability?

Where were the education ministers of Nova Scotia, New Brunswick and Newfoundland when their finance ministers extended the provincial sales tax to books?



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should be sent to: Prof. P. Cooney, Acting Chair, Department of Administrative Studies and Business Computing, The University of Winnipeg, 515 Portage Avenue, Winnipeg, Manitoba R3B 2E9. Fax: 204-786-1824.

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**UNIVERSITY OF SASKATCHEWAN** — The Department of Anatomy and Cell Biology, College of Medicine, University of Saskatchewan invites applications for a tenure-track faculty appointment at the rank of Assistant Professor, effective July 1, 1997. Areas of research in the Department include cell, molecular, and developmental biology; histology; morphology; and neurobiology. Applicants must have postdoctoral training and a strong research program in one of these areas. The appointee will be expected to teach histology and should have an ability to teach in one or more other areas of the anatomical sciences (cell biology, neurobiology/histology, developmental biology). The successful candidate will instruct medical and other undergraduate life science students and contribute to graduate courses and training in higher areas of research specialty. An application, curriculum vitae, names of three referees, and a statement of previous teaching experience and research interests should be submitted by May 15, 1996 to: Dr. G.D. Baskind, Department of Anatomy and Cell Biology, University of Saskatchewan, 107 Wiggins Road, Saskatoon, Saskatchewan S7N 5E5 Canada. The University of Saskatchewan is committed to the principles of Employment Equity. Women, people of aboriginal descent, members of visible minorities, and people with disabilities are invited to identify themselves as members of these designated groups on their applications. This position has been cleared for advertising at the tenure level. Applications are invited from qualified individuals regardless of their immigration status in Canada.

## ANIMAL SCIENCE

**UNIVERSITY OF ALBERTA, Edmonton** — Department of Agricultural, Food and Nutritional Science. Assistant, Associate or Full Professor. Industry-sponsored position in Swine Nutrition. Teaching and research in swine nutrition or related disciplines. The successful appointee will be expected to make a major contribution to the activities of the Alberta Pork Research Institute and in partnership of industry, government and university, committed to "meeting the needs of globally competitive pork production industry through the delivery of effective programs of training, research and technology transfer". Candidates must have a PhD and relevant postdoctoral experience and the ability to establish a strong research program. Salary range: Assistant Professor, \$33,230-\$55,526; Associate Professor, \$45,735-\$63,664; and Professor, \$60,567 and up. This tenured or tenure track position will be available July 1, 1996. In accordance with Canadian Immigration requirements, this advertisement is directed to Canadian citizens and permanent residents. Applications, including a short statement of teaching and research interest, curriculum vitae and the names of three referees should be sent by May 31, 1996 to: Dr. Keith Briggs, Chair, Department of Agricultural, Food and Nutritional Science, University of Alberta, Edmonton, Alberta T6G 2P5. For further information on this position contact Dr. Briggs at (403) 492-6711/(403) 492-4265 (fax) or e-mail: dkb@ed.ualberta.ca. The University of Alberta is committed to the principle of equity in employment. As an employer we welcome diversity in the workplace and encourage applications from all qualified women and men, including Aboriginal people, persons with disabilities, and members of visible minorities.

**ANTHROPOLOGY & CLASSICAL STUDIES**

**UNIVERSITY OF WATERLOO** — The Department of Anthropology and Classical Studies are looking for an individual to fill a joint tenure track position starting September 1, 1996. The Anthropology program needs include teaching Introductory Human Evolution (first year level), Archaeological Method and Theory (North American Prehistory, and your own special area). Ability to teach Introductory Sociocultural Anthropology and courses on Canadian Prehistory would be a definite asset. In Classical Studies the successful candidate will be expected to teach undergraduate courses in Greek and Roman art and architecture, as well as survey course in the history and culture of Greco-Roman Rome, and elementary to intermediate-level courses in Greek and/or Latin. Opportunities also exist for senior level instruction in the candidate's area of specialization. We are looking for an excellent teacher who can contribute in a number of ways to a small undergraduate department. Research area is open, but the person must have an active program with publications or potential publications. Salary range commensurate with qualifications and experience. Applicants should send CV and arrange for at least three referees to send letters of reference directly to Prof. R.L. Fowler, Chair, Department of Classical Studies, University of Waterloo, Waterloo, Ontario N2L 3G1 by May 31, 1996. In accordance with Canadian Immigration requirements, this advertisement is directed to Canadian citizens and permanent residents.

**BIOCHEMISTRY**

**THE UNIVERSITY OF ALBERTA** — Department of Biochemistry. Postdoctoral Position in Protein-Peptide Chemistry. Protein Structure-Function and Immunology. Three positions are available immediately in the Department of Biochemistry at the University of Alberta in Edmonton. We require self-motivated individuals with PhD degrees in organic chemistry or biochemistry and have experience and interests in one or more of the following areas: immunology, protein chemistry, protein structure and function or structural molecular biophysics/biochemistry. The current postdoctoral positions will be based in three areas: the application of synthetic peptides to the development of peptide-based vaccine technology applied to bacterial infections; the use of synthetic peptide mimics of membrane proteins to probe the structure and function of complex regulatory proteins; and systems de novo design of sheet and helical peptides and proteins. Excellent facilities including dedicated technical assistance are available. Excellent opportunities exist for interactions with other scientists in the MRC Group in Protein Structure and Function and the Protein Engineering Network Centre of Excellence. Interested candidates are invited to send their resumes to: Dr. Robert S. Hodges, Department of Biochemistry, University of Alberta, Edmonton, Alberta, Canada T6G 2P7. Phone: 403-492-7358. Fax: 403-492-0295; e-mail: robert.hodges@ualberta.ca. The University of Alberta is committed to the principle of equity in employment. As an employer we welcome diversity in the workplace and encourage applications from all qualified women and men, including Aboriginal people, persons with disabilities, and members of visible minorities.

## BIOLOGY

**MEMORIAL UNIVERSITY OF NEWFOUNDLAND** — Sir Wilfred Grenfell College, Biology. Sir Wilfred Grenfell College invites applications for a tenure-track and a 2-year contractual position in Biology. Both are an ecology position. Area of expertise within the general field of ecology is open, but preference may be given to applicants with research and teaching experience in freshwater biology or plant ecology. Teaching duties will include introductory biology and courses for upper year students. Sir Wilfred Grenfell College is the west coast campus of Memorial University of Newfoundland. It is a small institution currently offering programs leading to undergraduate degrees in Fine Arts (Visual Arts and Theatre), Arts (English, Psychology and Cognitive Studies) and Science (Environmental Science), or to admission to the University's professional faculties. Plans to develop additional areas of multi- and interdisciplinary study are underway. The appointment will be made at a junior level, with a PhD in hand or near completion being the minimum credential required for the position. Salary will reflect qualifications and experience in accordance with the Collective Agreement governing faculty and Memorial University of Newfoundland. The closing date is May 15, 1996 or when the position is filled. Both positions are subject to final budgetary approval. A letter of application, along with a Curriculum Vitae, teaching dossier, and the names of three referees, should be submitted to: Dr. Georg Günther, Vice-President, Sir Wilfred Grenfell College, Memorial University of Newfoundland, Corner Brook, NF A2H 6P9, Fax: (709) 637-6190. Memorial University is committed to employment equity in accordance with Canadian Immigration requirements, this advertisement is directed to Canadian citizens and permanent residents of Canada.

**BUSINESS**

**UNIVERSITY OF MANITOBA** — Faculty of Management. Applications are invited for Tenure-track positions in the areas of (i) accounting and (ii) finance with one position available in finance and two in accounting. Positions are subject to budget approval. Rank is at the Assistant or Associate level based on qualifications and experience. Visiting appointments are also possible. PhD or MBA, completed or near completion is required. Duties include research and teaching at the undergraduate and graduate levels. Salary is competitive and will depend on qualifications, experience and research record. Appointment is open. The University of Manitoba encourages applications from qualified women and men, including members of visible minorities, Aboriginal people and persons with disabilities. The University offers a smoke free work environment, save for specially designated areas. This advertisement is directed to Canadian citizens and permanent residents. Applicants should be sent to: Dr. Lawrence L. Gould, Head, Department of Accounting and Finance, University of Manitoba, Winnipeg, Manitoba, R3T 5V6. Evaluation of applications will commence after May 15, 1996.

## BUSINESS ADMINISTRATION

**LAKELAND UNIVERSITY** — The Faculty of Business Administration at Lakeland University invites applications for probationary (tenure track) appointments in the areas of finance, financial accounting, and information systems. Applicants should have completed or be nearing completion of a PhD. The successful candidates are expected to teach and develop undergraduate and graduate level courses and conduct research in their area of specialty. Appointments will be made at the rank of Assistant Professor and will commence on August 1, 1996 or January 1, 1997. Individuals interested in term positions will also be considered. These appointments are subject to final budgetary approval. Interested applicants should send a curriculum vitae, and the names and addresses of three referees to: Dr. Bahram Dastgostar, Dean, Faculty of Business Administration, Lakeland University, Thunder Bay, Ontario, Canada P7B 5E1. In accordance with Canadian Immigration requirements, this advertisement is directed to Canadian citizens and permanent residents. Lakeland University is committed to employment equity and encourages applications from women, members of visible minorities, Aboriginal people, and persons with disabilities.

## BROCK UNIVERSITY

### NSERC Research Chair in Oenology and Viticulture

A chair in oenology and viticulture is to be established at Brock University under the Natural Sciences and Engineering Research Council of Canada (NSERC) University Research Chair program. The partners are from different segments of the Canadian grape and wine industry. Brock University is located in the Niagara Region, Canada's premier grape-growing and wine-producing area.

This is part of a major initiative between the grape and wine industry and Brock University. Other components of the initiative include formation of the Coll. Canada Oenology and Viticulture Institute, the offering of a new B.Sc. (Hons) program in oenology and viticulture, and formation of a research consortium to help organize and build on existing research strengths with the grape and wine industry.

The incumbent will be expected to provide strong leadership in research in oenology and viticulture and will be a part of the Biotechnology research and teaching group based in the Departments of Biological Sciences and Chemistry. The appointment will be made at a tenure-track, senior level in any area of oenology and viticulture. The successful candidate will have a strong record of success in relevant research and must be prepared to make him or herself thoroughly familiar with the major research concerns of the cool climate grape and wine industries in Canada. He or she will also be experienced with acquiring research funds from NSERC or other funding agencies as well as industrial research support. The position is subject to final budgetary approval and receipt of support from NSERC.

**Dr. M.S. Manocha, Director**  
Cool Climate Oenology & Viticulture Institute  
Office of the Dean, Faculty of Mathematics and Science  
Brock University  
St. Catharines, ON L2S 3A1 Canada

Closing date is July 31, 1996. This advertisement is directed in the first instance to Canadian citizens or individuals who have permanent residency in Canada in accordance with Canadian immigration requirements. Brock University is an Equal Opportunity Employer.

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## FOR RENT

OUT OF COUNTRY — South France furnished farmhouse 5 br 2 baths. Rent short long term. Waterfront furnished studio on Mediterranean Sea Tel: 33 68 691501.



# McGill

## The Philip Fisher Chair in Social Work

The McGill School of Social Work invites applications for the endowed Philip Fisher Chair in Social Work.

The School has undergraduate (BSW) and graduate (MSW) programs, as well as a PhD program in conjunction with Université de Montréal. The curriculum embraces practice, administration and policy in a wide range of specialties. The multicultural, multi-racial character of the Schools milieu is emphasized throughout. Located within the School is the Centre for Applied Family Studies, an endowed research centre.

The person appointed should have an academic record consistent with appointment as Full Professor at McGill University. The School is willing to consider filling the Chair with either a permanent or a temporary appointment. Applicants should have a Social Work degree, and a doctorate in Social Work or a related discipline, and a demonstrated commitment to teaching, research and publication. Faculty in French is an asset.

Direct inquiries to: Dr. William Rowe, Director, McGill University, School of Social Work, 3506 University Street, Montreal, Quebec H3A 2A7, Canada

The review process will begin as of June 1, 1996. Applications will continue to be accepted until the position is filled.

In accordance with Canadian immigration requirements, this advertisement is directed to Canadian citizens and permanent residents. McGill University is committed to equity in employment.



**McMASTER UNIVERSITY**  
Department of Medicine  
Division of Geriatric Medicine

**CMH**  
Chedoke-McMaster Hospitals

The Department of Medicine of the Faculty of Health Sciences of McMaster University has opportunities for a minimum of two specialists in Geriatric Medicine in the Specialized Health Care for the Elderly Program.

The successful candidate will hold FRCP(C) in Medicine and a Certificate of Special Competence in Geriatric Medicine and be licensed to practice in the Province of Ontario. They will be appointed to a geographic full-time position in the Department of Medicine of McMaster University at appropriate academic rank and salary. It is expected that the proportion of time devoted to clinical and academic activity will be approximately in the ratio of 60:40. Preference will be given to candidates with expertise in research methodology. One of the positions requires extensive research experience and advanced training, as well as a track record in research relevant to geriatrics. It is anticipated that the successful candidates will develop collaborative research activities and be competitive for peer-reviewed funding.

In accordance with the Canadian Immigration requirements, this advertisement is directed initially to Canadian citizens and permanent residents of Canada. McMaster University is committed to a quality of employment for women, Aboriginal peoples, visible minorities, and disabled persons. Interested persons from these groups are encouraged to apply. Applications with curriculum vitae should be directed to:

**John A. Cairns, M.D., FRCP**  
Professor and Chair, Department of Medicine  
McMaster University, 1200 Main Street West, Room 3W10  
Hamilton, Ontario L8N 3Z5

The closing date for applications is May 13, 1996.



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**TRENT UNIVERSITY**—Subject to the approval of NSERC and budgetary approval, Trent University seeks candidates for a probationary appointment, effective September 1996, for an NSERC Junior Chair in Environmental Chemistry. The successful candidate will collaborate with Dr. Don Mackay, holder of the Trent-NSERC Chemical Industry Chair for Environmental Modeling. Salary will be commensurate with qualifications and experience. Qualifications: recent PhD in Environmental Chemistry with research emphasis on analysis and modeling of the fate of organic and/or metallic contaminants. The successful candidate will be expected to teach: Analytical Instrumental Chemistry, as well as basic courses in Organic or Inorganic Chemistry. Candidates must not currently hold fulltime faculty positions. A full curriculum vitae and the names and addresses of three referees who have been asked to write on the candidate's behalf are to be sent to: Dr. Paul F. Healy, Associate Dean of Research, Trent University, Peterborough, Ontario K9J 7B8 by May 31, 1996. Trent University is an employment equity employer, and especially invites applications from women, aboriginal peoples, visible minorities and disabled persons. In accordance with Canadian immigration requirements, the advertisement is directed to Canadian citizens and permanent residents.

**UNIVERSITY OF WATERLOO**—Chemistry. A tenure-track position is available at the University of Waterloo. We are seeking an outstanding candidate who will establish a creative and vigorous research program in a leading area of inorganic chemistry, and teach at both the graduate and undergraduate levels. The appointment is anticipated to be at the Assistant Professor level, but experienced candidates with excellent records will be considered for higher level appointments. Send a resume, a research proposal (if possible), and at least three letters of reference to Professor T.R. McMahon, Chair, Department of Chemistry, University of Waterloo, Waterloo, Ontario, Canada N2L 2G1. The position will remain open until filled. Additional information about the campus and the Guelph-Waterloo

Centre for Graduate Work in Chemistry is available at <http://www.chem.uwaterloo.ca/chemserv/gwc2.html>. In accordance with Canadian immigration requirements, this advertisement is directed to Canadian citizens and permanent residents of Canada; however, applications from all outstanding candidates will be considered. The University of Waterloo is an Employment Equity employer and encourages applications from qualified individuals, including women, members of visible minorities, native peoples, and persons with disabilities.

### 

**UNIVERSITY OF WATERLOO**—The Department of Classical Studies seeks applications for a tenure-track position beginning September 1996. The successful candidate will be expected to teach a wide range of courses in the undergraduate department, in Greek and Roman civilization and Greek and Latin languages, both on campus and by distance education. Research area is open, but the person must have an active program with publications or potential publications. Salary range commensurate with qualifications and experience. Applicants should send their CV and arrange for at least three referees to send letters of reference directly to R.L. Fowler, Chair, Department of Classical Studies, University of Waterloo, Waterloo, Ontario N2L 2G1 by May 31, 1996. In accordance with Canadian immigration requirements, the advertisement is directed to Canadian citizens and permanent residents. The University of Waterloo encourages applications from all qualified individuals, including women, members of visible minorities, native peoples, and persons with disabilities. This appointment is subject to the availability of funds. It is the intention of the University of Waterloo to fill its vacancies with recent PhD graduates appointed as Assistant Professors wherever possible.

### 

**UNIVERSITY OF NEW BRUNSWICK**—The Faculty of Computer Science, University of New Brunswick, invites applications for a tenure-track appointment at the Assistant Professor level

beginning September 1, 1996 or January 1, 1997. Salary will depend upon the qualifications and experience of the successful applicant who is expected to have a PhD degree or be nearing completion of this degree. Teaching at both the graduate and undergraduate levels with primary interest in Software Engineering. The candidate should have research experience and/or interest in most of the following areas: Object-Oriented Analysis and Design Methods; Visual Programming, C++, Smalltalk, and/or Visual Age; Reverse Software Engineering. Applicants must be prepared to actively pursue research and supervise graduate students in one or more of the above areas. The faculty offers the BSc, MSc and PhD degrees and has 22 faculty positions with 50 undergraduate and 60 graduate students. The University of New Brunswick is committed to the principle of Employment Equity in accordance with Canadian Immigration requirements, this advertisement is directed to Canadian citizens and permanent residents. Please direct all inquiries to Dr. W. Dana Watson, Dean, Faculty of Computer Science, University of New Brunswick, P.O. Box 4400, Fredericton, NB E3B 5A3, Phone (506) 453-4565; Fax (506) 453-3565; E-mail: [watson@unb.ca](mailto:watson@unb.ca). Closing date for applications: June 30, 1996.

**TECHNICAL UNIVERSITY OF NOVA SCOTIA**—Computer Science. Applications are invited for faculty positions in the School of Computer Science of the Technical University of Nova Scotia. Rank and salary are open, competitive and commensurate with qualifications. A PhD is required, with evidence of excellence in teaching and research. Duties will include teaching at the undergraduate, MSc, and PhD level. The school offers an accelerated mandatory cooperative undergraduate program and the only doctoral program in Computer Science in Nova Scotia. Applicants are primarily sought in the areas of software engineering, telecommunications and its applications, distributed systems, parallel computing, multimedia and user interface design. The Halifax metropolitan area has a population of close to 300,000, is the centre of Atlantic Canada and affords its residents a high quality of life. Applications, including a curriculum vitae and names and addresses of three referees, will be accepted until the positions are filled, and should be submitted to the Director, School of Computer Science, Technical University of Nova Scotia, P.O. Box 1000, Halifax, Nova Scotia, Canada B3J 2X4. Appointments are subject to final budgetary approval. In accordance with Canadian immigration requirements, priority will be given to Canadian citizens and permanent residents of Canada. The University of Nova Scotia is committed to the principles of employment equity and encourages applications from all qualified persons, including women, aboriginal peoples, people with disabilities and visible minorities.

**L'UNIVERSITÉ D'OTTAWA, département d'informatique** sollicite des candidatures pour un poste d'enseignement en français ou en anglais, menant à la permanence, au niveau de professeur (ajouté). Le bilinguisme constitue un atout (indiquer cette information dans votre CV). Les exigences du poste sont: un doctorat en informatique ou dans une discipline connexe, un excellent potentiel dans l'enseignement et la recherche, des domaines de recherche seront considérés, avec préférence pour: bases de données, graphiques, architecture des systèmes, systèmes d'exploitation, langages et systèmes de programmation et simulation. Le département offre des programmes d'informatique au niveau du baccalauréat, de la maîtrise et du doctorat. Les possibilités de recherche sont excellentes. Nous avons des groupes de recherches établis dans des domaines des algorithmes, génie logiciel, intelligence artificielle, systèmes experts et télécommunications. Il y a trois départements d'informatique et de recherches établies dans des domaines des industries et gouvernementales. Cette offre d'admission en premier lieu aux citoyens canadiens et aux résidents permanents. L'Université d'Ottawa encourage les candidatures et elle encourage fortement les candidatures bilingues. Si vous désirez plus d'informations au sujet de notre département, veuillez consulter <http://www.uottawa.ca>. Les personnes intéressées à postuler sont priées de faire parvenir, avant le 15 mai 1996, leur curriculum vitae ainsi que le nom et l'adresse de trois personnes pouvant fournir des lettres de référence à Monsieur Luigi Contino, Directeur d'Informatique, Université d'Ottawa, Ottawa, Ontario K1N 6N5.

**THE UNIVERSITY OF OTTAWA, Department of Computer Science** invites applications for a tenure-track teaching position at the assistant professor level. The position is for teaching in French or English, but bilingualism would be an asset (please include this information in your CV). The requirements for this position are: a PhD in Computer Science or a related discipline, a strong potential in teaching and research. All areas of research will be considered but a preference will be given to candidates involved in the areas of: databases, computer architecture, operating system, programming languages and systems, and simulation. The Department currently offers programs at the undergraduate, masters and PhD level. The research possibilities are excellent. We have well established research groups in the areas of: algorithmics, systems engineering, artificial intelligence, distributed systems and telecommunications. In the Ottawa region, there are three Departments of Computer Science and also important research centres, industrial and governmental. In accordance with Canadian

immigration requirements, priority will be given to Canadian citizens and permanent residents. Equity is a University policy. We particularly encourage applications from female candidates. For more information regarding our department, you may consult <http://http://www.uottawa.ca>. The closing date for applications is May 15, 1996. Interested applicants should forward their curriculum vitae and the names and addresses of three references to: Dr. Luigi Contino, Chair, Department of Computer Science, University of Ottawa, Ottawa, Ontario K1N 6N5.

### 

**UNIVERSITY OF MANTOYA**—Pediatric Dentistry Faculty Position. Faculty of Dentistry. Applications are invited for a full-time, tenure track faculty position at the rank of Assistant Professor, effective July 1, 1996. Responsibilities include administrative, teaching and clinical undergraduate teaching in pediatric dentistry, research and service. Applicants must have completed a North American accredited graduate program in pediatric dentistry. Private practice privileges, extra- or intra-mural, are available one day per week. Salary will be commensurate with qualifications and experience. The University of Mantova encourages applications from qualified women and men, including members of visible minorities, Aboriginal peoples, and persons with disabilities. The University offers a smoke-free environment, save for special designated areas. Priority consideration will be given to Canadian citizens and permanent residents. To apply, send curriculum vitae and arrange for at least three letters of reference to be mailed to: Dr. D.L. Spence, Head, Dental Diagnostic and Surgical Sciences, 780 Barnside Avenue, Winnipeg, MB R3E 0W2. Deadline for applications is June 30, 1996.

### 

**THE UNIVERSITY OF CALGARY** Departments of Geography, Geology and Geophysics, and Archaeology invite applications for a five-year Centennial Term Specific Appointment in Earth Science at the Assistant Professor rank, to begin July 1, 1996. A PhD is required for this position. The successful candidate will be expected to teach in the three-year field school, soils/geography, computer mapping, and to serve as the program advisor for the three disciplines. The duties also include undergraduate teaching, graduate teaching and supervision, research, and university service. In accordance with Canadian immigration requirements, priority will be given to Canadian citizens and permanent residents of Canada. The University of Calgary is committed to Employment Equity. The closing date for applications is May 15, 1996. Applicants should send a letter of application, three letters of reference and a curriculum vitae, to: Dr. S.E. Franklin, Head, Department of Geography, The University of Calgary, 2500 University Drive N.W., Calgary, AB T2N 1N4.

### 

**SAINT MARY'S UNIVERSITY**—Department of Economics. Applications are invited for one, possibly two, positions at the Lecturer/Assistant

Professor rank, commencing September 1st, 1996, and subject to budgetary approval. Applicants for the positions should have a PhD (completed or near completed) and a strong interest in teaching introductory and upper level undergraduate courses, and should be actively pursuing professional research. Previous teaching experience is desirable. For an open interest in Money & Banking, International Finance, Public Finance and Development. Candidates, however, with interest and training in all areas are encouraged to apply. Applicants are requested to forward a letter of application and curriculum vitae to: Dr. Saleh Amrkhallal, Chair, Department of Economics, Saint Mary's University, Halifax, Nova Scotia, B3H 3C3, Canada. In addition, they should arrange for three (3) referees to send letters of reference directly to the Chair at the above address. Applicants will be accepted until positions are filled. In accordance with Canadian immigration requirements, this advertisement is directed to Canadian citizens and permanent residents of Canada. Saint Mary's University encourages applications from women, aboriginal peoples, visible minorities, and persons with disabilities.

**UNIVERSITY OF ALBERTA, Edmonton**—The Department of Economics is one of the departments in the Faculty of Agriculture, Forestry and Home Economics, University of Alberta, invites applications for an Assistant Professor, tenure-track position in Resource Economics. Qualifications are: PhD in economics or agricultural economics, specializing in natural resource or environmental economics. The Assistant Professor salary range is \$39,320 to \$55,526. The position is available July 1, 1996. In accordance with Canadian immigration requirements, this advertisement is directed to Canadian citizens and permanent residents. Applications, including a statement of research and teaching interests, curriculum vitae and the names of three referees should be sent to: Michele Veeman, Chair, Department of Rural Economy, University of Alberta, Edmonton, Alberta T6G 2G1 by June 15, 1996. The University of Alberta is committed to the principle of equity in employment. As an employer, we welcome diversity in the workplace and encourage applications from all qualified women and men, including Aboriginal peoples, persons with disabilities, and members of visible minorities.

### 

**ENGINEERING**

**LAKEHEAD UNIVERSITY**—The Department of Electrical Engineering at Lakehead University invites applications for a probationary tenure track position at the rank of Assistant Professor, from electrical engineers with a PhD in telecommunications engineering with specialization in networks and/or signal processing. The successful candidate will be expected to: (1) teach effectively and to develop laboratories in the undergraduate level; (2) develop a significant research program and attract research grants; (3) be dedicated to engineering education and work effectively with colleagues in the Department. The successful candidate must be, or be qualified and prepared to become, a Licensed Professional Engineer. The position is subject to final budgetary approval. Interested applicants should submit a curriculum vitae, and the names, addresses and phone numbers of three referees

## 

**Lecturer/Assistant Professor (Term Appointment)**  
**Maritime School of Social Work**

### 

- Teach social work practice courses in a BSW program that includes analyses of gender, heterosexism, race, ethnicity, disability, regional social/economic conditions
- Supervise field practice

### 

- PhD or equivalent degree preferred
- Graduate degree in social work
- Demonstrated teaching effectiveness
- Experience in social work practice

### 

Commensurate with qualifications and experience

Starting August 1, 1996 to June 30, 1997—Subject to budgetary approval.

Dalhousie University is an employment equity/affirmative action employer. The University encourages applications from qualified women, aboriginal peoples, visible minorities, and persons with disabilities.

Please submit a curriculum vitae and related application material along with the names of at least three academic and professional references by May 15, 1996 to:

**Professor Joan Gilroy, Director**  
**Maritime School of Social Work**  
**Dalhousie University**  
**6414 Coburg Road**  
**Halifax, NS B3H 2A7**  
**Tel: (902) 494-3760**  
**Fax: (902) 494-7116**

## 

**Term Appointment in Asia-Pacific Law Centre for Asia-Pacific Initiatives and the Faculty of Law, University of Victoria British Columbia, Canada**

The Centre for Asia-Pacific Initiatives (CAPI) and the Faculty of Law invite nominations and applications for a one to three-year term appointment at the Assistant Professor or Junior Associate Professor level to a non-tenure track position specializing in Asia-Pacific legal subjects. The appointment will be made jointly by CAPI and the Faculty of Law of the University of Victoria. The candidate should have a record of scholarship and a network of personal and institutional contacts in the Asia-Pacific region appropriate to the candidate's career stage. Past success at attracting external funding would be an advantage, as would fluency in an Asian language. Areas of particular interest to the Centre and the Faculty include international/regional economic law, environmental law, marine and land resources, human rights, comparative constitutional law, intellectual property and development law and policy. In addition to teaching responsibilities in the Law Faculty, the successful candidate will be expected to implement a research agenda and play a significant role in the Centres programs.

CAPI is an interdisciplinary university Centre located in the Law Building, with a mandate to promote and conduct research on public policy and related programs in the Asia-Pacific region. The appointee will be expected to pursue a CAPI-based proactive Asia-Pacific research and outreach program.

Please send all applications and nominations to Professor William Neilson, Chair, Joint Search Committee, Centre for Asia-Pacific Initiatives, Room 131, Begbie Building, University of Victoria, P.O. Box 1700, Victoria, BC V8W 2Y2; Fax: (604) 721-3107; E-mail: [CAPSEC@UVVM.UVIC.CA](mailto:CAPSEC@UVVM.UVIC.CA).

Nominations and applications should reach the Search Committee as soon as possible. It is hoped that an appointment can be made for July 1996, but appointment at a later date will be considered.

The University of Victoria is an equity employer and encourages applications from women, persons with disabilities, visible minorities, and aboriginal persons.

In accordance with Canadian immigration requirements, this advertisement is first directed to Canadian citizens and permanent residents. Others are encouraged to apply but are not eligible for appointment until a Canadian search is completed and no appointment made.



Phone: (604) 721-7020  
Fax: (604) 721-3107



## 

Applications and nominations are invited for the position of Vice-President (Academic). The appointment will be effective January 1, 1997 for an initial term of five years, with the possibility of renewal.

The Vice-President (Academic) is responsible to the President for the development of the academic policies of the University and, in consultation with the Deans, for the general administration of the academic programs. The Vice-President (Academic) is the senior Vice-President and serves as Acting President in the absence of the President. Applicants should have an established reputation as an academic scholar, teacher and researcher, and demonstrated experience in university administration. The successful candidate will be dedicated to fostering academic excellence and will have a demonstrated commitment to equity as well as the ability to communicate effectively.

The University of Saskatchewan is a publicly funded institution established in 1907. Student enrollment for 1995-96 is approximately 19,500. The University offers a full range of curricula both academic and professional with students registered in thirteen colleges including the full range of health sciences (Dentistry, Medicine, Nursing, Pharmacy and Nutrition, Physical Education and Veterinary Medicine). The University has an annual research budget of \$50 million and Innovation Place, the University's research and development park, hosts 62 companies with over 1200 employees many of which are "spin off" companies whose genesis is a result of intellectual activity at the University.

Applications should be accompanied by a detailed curriculum vitae and names of at least three referees. Letters of nomination should include biographical details of the nominee. Applications, nominations and enquiries should be submitted not later than May 30, 1996 to:

**President J.W. George Ivany**  
**University of Saskatchewan**  
**105 Administration Place**  
**Saskatoon, SK S7N 5A2**

In accordance with Canadian immigration requirements, this advertisement is directed to Canadian citizens and permanent residents. The University of Saskatchewan is committed to the principles of Employment Equity and welcomes applications from all qualified candidates. Women, people of aboriginal descent, members of visible minorities, and people with disabilities are invited to identify themselves as members of these designated groups on their application.



## Classifieds

to: Dr. J.G. Locker, Dean, R.Eng., Faculty of Engineering, Lakehead University, 955 Oliver Road, Thunder Bay, Ontario P7B 5E1. In accordance with Canadian Immigration regulations, this advertisement is directed to Canadian citizens and permanent residents. Lakehead University is committed to employment equity and encourages applications from women, members of visible minorities, aboriginal peoples, and persons with disabilities.

**UNIVERSITY OF ALBERTA, Department of Occupational Health and Safety**  
The University of Alberta is seeking a full-time, permanent Position, HSE/Jr. Chemist in Welding and Corrosion Engineering. Applicants are invited to submit a resume and cover letter to the Assistant Professor, Occupational Health and Safety, University of Alberta, 116-11600-85th Avenue, Edmonton, Alberta T6G 2G8. Salary: \$55,000/year. with an annual salary in the \$45,000 to \$55,000 range. Candidates must hold (or expect to receive) a M.Sc. degree in Welding and Corrosion Engineering or an equivalent degree in the other discipline. The successful candidate will be responsible for research funded by NOVA Corporation of Alberta and the Natural Sciences and Engineering Research Council of Canada. The successful candidate is expected to develop a viable and productive research program in co-operation with industry and existing staff in the Welding and Corrosion Engineering Department. The research program will include chemical, oil sands processing and pulp & paper sectors. There will also be teaching of graduate students in the Welding and Corrosion Engineering Department. The successful candidate is expected to develop graduate courses in Materials Engineering. Applications & resumes requested prior to June 18, 1996. Please include a recent 4 color and 40 mm film photograph. Please include information on immigration requirements, this is a permanent position. Please include references and a statement of current field and research interests. Should be sent to: Dr. S.E. Hogg, Occupational Health and Safety, Department of Engineering University of Alberta, Edmonton, Alberta, Canada T6G 2G8. The University of Alberta is committed to the principle of equity in employment and encourages all qualified persons to apply. The University is an equal opportunity employer and encourages applications from all qualified women and men, including members of visible minorities.

THE UNIVERSITY OF MANITOBA, Department of Electrical and Computer Engineering invites applications for a tenure-track position at the rank of Assistant Professor. The successful candidate will hold the PhD degree or equivalent, and have the ability and enthusiasm to teach in any of the basic undergraduate areas of hardware and software in computer engineering, while pursuing research in a related area. The Department of Electrical and Computer Engineering group and the industry which it serves. The computer group has general interest in hardware/software co-design, software engineering, computer architecture, computer communications, VLSI real-time systems, neurocomputing and intelligent systems. The group currently has 6 professors, 1 staff professor and 10 research associates. Research areas include: computers, robotics, neural networks, and computer-aided design. The Department as a whole has 25 professors many of whom are also collaborating in these areas. Applications from qualified women and men, and from persons of all ethnic backgrounds and Aboriginal people, and persons with disabilities will be welcome. The University of Manitoba particularly encourages applications from qualified women. The University offers a significant salary and a comprehensive benefits program. Priority consideration will be given to Canadian citizens.

citizens and permanent residents. Membership or eligibility for membership in a Canadian Professional Engineering Association is a requirement. Applications, including curriculum vitae and the names of three referees should be sent before June 30, 1996 to: Dr. R.W. Menzies, Head, Department of Electrical and Computer Engineering, The University of Manitoba, Winnipeg, Manitoba, Canada R3T 5V6; Telephone: (204) 474-9099; Fax: (204) 261-4639; e-mail: menzies@ee.umanitoba.ca; website: <http://www.ee.umanitoba.ca>

**UNIVERSITY OF MANITOBA, Department of Electrical and Computer Engineering** invites applications for a professor level. The successful candidate will hold the PhD degree or equivalent, and have a minimum of 5 years of postgraduate research experience in the field of electrical engineering. The successful candidate will be given to candidates prepared to teach and conduct research in the area of electrical power engineering. The power research group at the University of Manitoba has an established reputation for research at the international level and is active in working with local and international utilities, research organizations and government departments. The University offers 4 postdoctoral fellows, 3 adjunct professors and 3 graduate students. Applications from persons with a proven record of research in the areas of renewable energy, power systems, microsystems, Aboriginal people, and persons with disabilities will be welcome. The University is an equal opportunity employer and is open to qualified women. The University offers smoke-free environment, save for specially designated smoking areas. For more information, contact: Dr. J. R. McNeill, Department of Electrical Engineering, University of Manitoba, 605-275, Main Street, Winnipeg, MB, Canada R6T 5K6. Tel: (204) 256-6333; fax: (204) 256-6335; e-mail: manos@ee.umanitoba.ca. 2001-01-03

**UNIVERSITY OF MANITOBA.** The Department of Mechanical and Industrial Engineering at the University of Manitoba is accepting applications for a full-time faculty position in the area of Mechanical Engineering Design with specialization emphasizing computer aided design and the application of such applications in one or more of the following areas: design of mechanisms, linkages, mechanisms, finite element methods and stress analysis. The appointment is intended to be for a five year period with a salary range of \$45,000 to \$55,000. The Department of Mechanical and Industrial Engineering is responsible for two fully-accredited undergraduate programs in Mechanical Engineering and Mechanical Engineering and research at the M.Eng., M.Sc. and Ph.D. levels. Currently, there are two NSERC Industrial Chairs in the Department: one in the area of Mechanical Engineering and Aerospace Materials. The Department comprises 24 academic staff, 12 support staff, several post-doctoral fellows, research associates and 10 graduate students. There are approximately 100 graduate students and 350 undergraduate students. Candidates for the position must have a Ph.D. degree in a field related to the position and a minimum of 3 years' experience. We include undergraduate and graduate teaching and supervision of graduate students and the development of new graduate programs in the department. The University of Manitoba encourages

Applications from qualified women and men, including members of visible minorities, aboriginal peoples and persons with disabilities. The University offers special programs and awards, save for specially designated areas. Priority consideration will be given to Canadian Citizens and Permanent Residents. Applicants should send a resume, the names and addresses of at least three references and a one-page statement of research and teaching goals. Please submit all materials to Professor H.A. Soliman, Chair of the Search Committee, Department of Mechanical and Industrial Engineering, University of Regina, Winnipeg, Manitoba, Canada S4S 0X6. Phone: (204) 474-3983; Fax: (204) 275-5707. Applications will be accepted until June 15, 1996.

**UNIVERSITY OF TORONTO**—The Department of Electrical and Computer Engineering invites applications for a tenure-track Assistant Professor position in the area of microelectronic devices. The position has experience in the research interests in the area of digital electronics and VLSI systems with an emphasis on low power design. The position involves both research and teaching responsibilities. The successful candidate will hold a Ph.D. degree in electrical engineering. Applicants must have a doctoral degree, an outstanding academic record and effective teaching ability. Salary commensurate with qualifications and experience. For consideration, send curriculum vitae, a statement concerning teaching and research interests, and a list of three references by June 30, 1996 to: Professor Sefurtluf G. Zakay, Chair, Department of Electrical and Computer Engineering, University of Toronto, King's College Road, Toronto, Ontario M5S 3G3, Canada. The Appointment will be made as soon as possible after the closure date. In accordance with the University's policy on diversity, the position will be given to Canadian citizens and permanent residents of Canada. The University of Toronto is committed to employment equity and encourages applications from women, visible minorities and people with physical disabilities and/or handicaps.

**UNIVERSITY OF WATERLOO** — The Department of Systems Design Engineering at the University of Waterloo invites applications for an Assistant Professor in the field of intelligent systems. Candidates should have demonstrated research and teaching experience in one or more of the following areas: software engineering, machine intelligence, image processing, pattern recognition, robotics, or expert systems. The candidate should possess a Ph.D. in a related area with a strong background in engineering. A minimum of five years of postgraduate research experience in the Province of Ontario is essential. We seek candidates with a commitment to excellence in research and teaching at both the undergraduate and graduate levels. The successful candidate will be expected to teach undergraduate courses such as software design and digital logic, and to supervise graduate students in an interdisciplinary department with a strong focus on systems methodology and an emphasis on research in intelligent systems. The successful B.A.Sc., M.A.Sc. and Ph.D. degrees in Systems Design Engineering. The candidate will be expected to contribute both to the core program and to the graduate program. The successful candidate will also be expected to provide course teaching, undergraduate student design projects, supervision of graduate student design projects, supervision of graduate student research projects, and to contribute to the work of the Department. Further information about the position can be found at <http://uwaterloo.ca/eng/engdept/engdept.htm>. The successful candidate will be a permanent employee. Interested applicants should request

viduals, including women, members of visible minorities, native peoples, and persons with disabilities. This appointment is subject to the availability of funds.

**UNIVERSITY OF WATERLOO** — The Department of Systems Design Engineering at the University of Waterloo invites applications for a full-time Assistant Professor in the area of mechatronics and robotics. Candidates should have demonstrated research ability and potential in mechatronics and robotics, with a strong background in hardware and software of design and analysis of controlled electromechanical systems. A strong background in control systems, including a Ph.D. in a related area with a concentration in graduate level courses such as control systems, robotics, or dynamics of systems. Industrial experience is highly desirable and eligibility for certification in the Professional Engineering Institute of Ontario's essential Systems Design Engineering is an inter-disciplinary background with a strong background in systems design. The position has an emphasis on engineering design. Successful candidates will be expected to contribute to the department program, through their participation in teaching and research activities, and to supervise student design project supervision, and graduate student supervision. Further information about the department can be found at <http://www.sde.uwaterloo.ca>. Application packages should be requested from Prof. Keith W. Hoel, Chair, Department of Systems Design Engineering, University of Waterloo, Waterloo, Ontario, N2L 2G1, Canada. E-mail: [keith.hoel@uwaterloo.ca](mailto:keith.hoel@uwaterloo.ca) or [vgire@engineering.uwaterloo.ca](mailto:vgire@engineering.uwaterloo.ca). The closing date for applications is June 15, 1996 and applications should be submitted to the Department on or before September 1, 1996. In accordance with Canadian Immigration requirements, the advertisement is directed to Canadian citizens and persons who are eligible to work in Canada. The University encourages applications from all qualified individuals, including women, members of visible minorities, native peoples, and persons with disabilities. The University is an equal opportunity employer.

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**UNIVERSITY OF WATERLOO** — The Department of Electrical & Computer Engineering at the University of Waterloo invites applications for tenure track and definite term faculty positions in the following areas of electrical and computer engineering: (i) Communications and Information Systems; (ii) Computer Hardware and Software Engineering; (iii) Semiconductor Devices.

and Microelectronics, (iv) Power and Energy Systems; (v) Microwaves, Antennas, and RF Engineering. The level of appointment and salary will be commensurate with the qualifications of the candidate. The candidate must have an earned doctoral degree and a strong commitment to research and teaching. It is the intention of the University of Waterloo to fill its vacancies with post-PhD graduates as appointed as Assistant Professor, even those people. Applications with complete curriculum vitae and names of three references should be sent to: Dr. S.K. Chaudhuri, Chair, Department of Electrical and Computer Engineering, University of Waterloo, Waterloo, Ontario, Canada N2L 3G1. In accordance with Canadian Immigration requirements, this advertisement is directed to Canadian citizens and permanent residents. The University of Waterloo encourages applications from all qualified individuals, including women, members of visible minorities, native peoples, and persons with disabilities.

**ENGLISH**

**UNIVERSITY OF WATERLOO**—Department of English. Applications are invited for three tenure-track positions at the assistant professor level in the Department of English, with preference in either (a) American literature, (b) literature of the Early Modern Period with an emphasis on Shakespeare, or (c) Twentieth Century British literature. Demonstrated strength in teaching and post-PhD research are essential. The successful candidate will have duties which include teaching undergraduate and graduate courses. The Department offers distinctive opportunities for research in American and Postcolonial Writing at both the undergraduate and graduate levels; and applications are invited from those with a strong research and/or teaching interest in areas relevant to these programs. Salary negotiable. Appointment effective September 1, 2000. For consideration, please send curriculum vitae, references, writing samples, writing samples and letters of reference no later than June 1 to Dr. William J. Bennett, Department of English, University of Waterloo, Waterloo, Ontario, Canada, N2L 3G1. In accordance with Canadian law, the University of Waterloo does not discriminate on the basis of race, ethnicity, or sexual orientation. The University of Waterloo encourages applications from persons with disabilities, including women, members of visible minorities, mature people, and persons with disabilities. These appointments are subject to the availability of funds.

UNIVERSITY COLLEGE  
of the FRASER VALLEY

**Instructor**  
**Business Administration**  
Full-time, permanent

The University College of the Fraser Valley, an institution with campuses in Abbotsford, Chilliwack, Mission and Hope, requires a faculty member to teach entrepreneurship in the Business Administration department commencing August 1, 1996.

**Duties:** The successful candidate will have expertise in the area of entrepreneurship and will also be qualified to teach introductory courses in the area of management and/or marketing.

Applicants must have a master's degree in the area of expertise, or related field (PhD preferred), and several years of business experience. Demonstrated excellence in teaching at the post-secondary level is required, and a commitment to scholarly activity is considered an asset. Applicants should be prepared to teach at the certificate, diploma, and degree level in their area of expertise.

**Salary:** To be determined by the appropriate placement on our faculty salary scale contained in the current collective agreement.

Applications detailing education and experience should be forwarded no later than May 31, 1996 to the University College

forwarded no later than May 31, 1998 to the University College of the Fraser Valley, Employee Relations Department, 33844 King Road, Abbotsford, BC V2S 4N2  
Phone: 854-4526 Fax: 854-1538 Email: [scarrown@ucfv.bc.ca](mailto:scarrown@ucfv.bc.ca)

Posting No. 96.08e

UCFV is an Employment Equity Employer 806-14

**Assistant/Associate Professor  
Project Management/Management  
of Technological Change**

The University of Calgary, Faculty of Management, invites applications for a tenure-track appointment as Assistant/Associate Professor in Project Management/Management of Technological Change, subject to budget approval. The position is effective July 1, 1996, or as soon as possible thereafter.

The successful candidate will participate in achieving the Vision of Project Management, a joint specialization of the Faculties of Management and Engineering, and local industry. This Vision champions The University of Calgary as a recognized global leader in improving the practice of Project Development and Management through education and research, with particular emphasis on improving management of technological change.

The ideal candidate will be an enthusiastic and capable teacher with both undergraduate and graduate levels, hold a PhD in Management, with a specialization in Project Management or related field, be capable of starting an independent research program, and have at least five years of progressive and relevant industrial experience. The research program will include front-end issues of projects related to one or more of the following: risk, fit to corporate strategy planning to accommodate internal and external factors, decision-making, resistance to change, organizational issues, or related computer modelling. Relevant experience in project development, design and implementation, international experience, and demonstrated skills in research and teaching will be considered valued assets.

In accordance with Canadian immigration requirements, priority will be given to Canadian citizens and permanent residents of Canada. The University of Calgary is committed to Employment Equity.

The closing date for applications is May 15, 1996. Please send a curriculum vitae, and names and addresses of three references, to:

Dr. Malcolm C. Munro, Associate Dean (Research)  
Faculty of Management  
The University of Calgary, 2500 University Drive NW  
Calgary, Alberta, Canada T2N 1N4  
Phone: (403) 220-7147 Fax: (403) 282-0095  
<http://www.ucalgary.ca>

## OFFRE D'EMPLOI

**POSTE EN LANGUE ET LITTÉRATURE FRANÇAISES**

Le Département de français de l'Université Laurentienne désire combler un poste en langue et littérature françaises pour l'année universitaire 1996-97.

Il s'agit d'un contrat de 12 mois s'étendant du 1<sup>er</sup> juillet 1996 au 30 juin 1997, au rang de professeur(e) adjoint(e). Le poste exige le doctorat en littérature française, une solide expérience universitaire en enseignement de la littérature (française et francophone) et de la langue (grammaire, rédaction, communication), et un dossier de publications.

Faire parvenir  
dation avant le

**ANNULEE**

de recommen-

Directeur  
Département de français  
Université Laurentienne  
Sudbury (Ontario) P3E 2C6

*L'Université Laurentienne souscrit au principe de l'équité en matière d'emploi et encourage toutes les personnes qualifiées, y compris les femmes, les autochtones, les membres des minorités visibles et les personnes handicapées à poser leur candidature.*

Conformément aux exigences de l'immigration canadienne, cette annonce s'adresse en premier lieu aux citoyens et citoyennes canadiens ainsi qu'aux résidents et résidentes permanents.



UNIVERSITÉ LAURENTIENNE



THE UNIVERSITY OF  
CALGARY







# Classifieds

Information Services Department, which, in addition to the provision of reference services to faculty, on-campus students and off-campus students, the interlibrary loan service, and a unit dedicated to the provision of library services for off-campus students, for a total complement of 10 individuals. In addition to a central information desk, services include the provision of a wide variety of resources in both print and electronic formats. The instruction in the use of these resources, including the online public access catalogue, the Internet, the CD-ROM network, workshops and presentations designed for specific academic departments and programs; development of the reference collection of print materials. All of these duties are performed within a collegial, collaborative, and cooperative framework. Applicants must have a master's degree in library science from an accredited institution, with five to three years of experience. A broad knowledge of current and developing information technologies, experience in database searching, excellent verbal and written communication skills, and a demonstrated ability to deal with the public are also required. A flexible approach to assigned responsibilities is considered important. The position includes evening and weekend work. The University is an employment equity employer and actively invites candidates of visible minorities, aboriginal peoples, viable minorities and disabled persons. In accordance with Canadian immigration requirements, priority will be given to Canadian citizens and permanent residents. Librarians are considered part of the academic staff, and are full members of the Trent University Faculty Association. The position will be filled at a level commensurate with qualifications and experience, with a minimum salary at the rank of Librarian I. Rates in this position are \$28,000 to \$32,000. For more information, send resume and three letters of reference, by May 31, 1996, to: Mr. Murray Green, University Librarian, Thomas J. Barry Library, Trent University, Peterborough, Ontario, K7N 7B5. Or fax to (705) 748-1315.

## LINGUISTICS

**UNIVERSITY OF CALGARY** — The Department of Linguistics at the University of Calgary invites applications for an eight-month full-time seasonal position commencing September 1, 1996. Applicants should have a PhD with a specialization in a core area of linguistics and relevant teaching experience. Applicants with a specialization in phonology are particularly welcome. The position involves teaching introductory linguistics courses and other courses in the successful applicant's areas of expertise. Compensation for the term of \$25,000 plus travel expenses. In accordance with Canadian immigration requirements, priority will be given to Canadian citizens and permanent residents of Canada. The University of Calgary has an Employment Equity Program and encourages applications from all qualified candidates. Applicants should send a letter of interest, curriculum vitae and arrange to have three letters of reference forwarded to the Department Head by May 31. Evidence of quality in teaching would also be welcome. Dr. Robert M. Murray, Department of Linguistics, University of Calgary, 2500 University Drive N.W., Calgary, Alberta, Canada T2N 1N4. Telephone: (403) 220-6366 or 220-5469. Fax: (403) 248-5467. E-mail: rmmurray@uacs.calgary.ab.ca

**UNIVERSITY OF BRITISH COLUMBIA** — Department of Linguistics. Applications are invited for one or more full or part-time seasonal positions (8 months) commencing September 1, 1996, to replace faculty on leave. The appointments will cover some combination of graduate and undergraduate courses in the following areas: (a) phonology and/or phonetics (phonology and acoustics), (b) syntax or syntactic theory, (c) semantics. The successful candidate(s) should have completed a PhD in the time of appointment. Send a c.v. including the names, addresses and fax numbers of three referees, sample of research papers, and a summary of teaching evaluations to: Dr. M.D. Kinkade, Head, Department of Linguistics, 1866 Main Mall, University of British Columbia, Vancouver, BC V6T 1Z1. Telephone: (604) 822-4817. Deadline for receipt of applications is May 31, 1996. In accordance with Canadian immigration requirements, priority will be given to Canadian citizens and permanent residents of Canada. UBC welcomes all qualified applicants, especially women, aboriginal peoples, viable minorities, and persons with disabilities.

## MIDDLE EAST & ISLAMIC STUDIES

**UNIVERSITY OF TORONTO** — Arabic Language and Literature. The Department of Near and Middle Eastern Civilizations invites applications for a tenure-stream Assistant Professor in Arabic language and literature. Applicants must hold the PhD degree and be able to teach undergraduate and graduate courses in Arabic language and various genres of classical Arabic literature, as well as courses that place Arabic language within the broader Islamic religious-cultural framework. The Department of Near & Middle Eastern Civilizations is seeking a colleague who will complement its offerings in Islamic studies (Persian and Turkish languages and literatures, medieval Islamic history, history of the modern Middle East, and Islamic religion). The position is effective July 1, 1997. Applications will be considered by the Search Committee after November 1, 1996. Applicants are requested to send a covering letter outlining their research and teaching interests, together with a curriculum vitae, and to arrange for three letters of reference to be sent directly to: Chair, Arabic Language & Literature Search Committee, Department of Near & Middle Eastern Civilizations, 130 St. George St., Rm. 4087, University of Toronto, Toronto, Ontario M5S 3H1. In accordance with Canadian immigration requirements, this advertisement is directed to Canadian citizens and permanent residents of Canada. In accordance with its Employment Equity Policy, the University of Toronto encourages applications from qualified women or men, members of visible minorities, aboriginal peoples and persons with disabilities.

## MOLECULAR IMMUNOLOGY

**UNIVERSITY OF BRITISH COLUMBIA** — Molecular Immunology. A position for a research associate will be available from July 1996, in a laboratory applying a novel molecular genetic technology to the generation of human monoclonal antibodies. A PhD in a related field, required with four or more years of post-doctoral experience in molecular immunology. A detailed knowledge of high performance liquid chromatography, protein chemistry, immunology and processing of single cells. Experience with a wide range of experimental techniques is required, including cDNA cloning.

cDNA sequencing, Southern blotting, eukaryotic expression systems, tissue culture, gene transfer using ELISA analysis. The successful applicant will be knowledgeable, highly motivated, experienced in the preparation of manuscripts and able to work independently. Send the names and addresses of three referees to: Professor Tom Stevens, Acting Director, School of Outdoor Recreation, Parks and Tourism, Lakehead University, 955 Oliver Road, Thunder Bay, Ontario, P7B 5E1. (807) 347-8756 (voice); (807) 346-7838 (fax). In accordance with Canadian immigration regulations, this advertisement is directed to Canadian citizens and permanent residents of Canada. The University of British Columbia encourages applications from qualified women or men, members of visible minorities, aboriginal peoples and persons with disabilities.

## MUSIC

**BRANDON UNIVERSITY** — School of Music. Notice of Vacancy position in Celli. Position: Full-time, probationary rank dependent upon qualifications. Qualifications: DMA preferred. Masters degree or equivalent in music. A distinguished record of cell performance and teaching. Duties: Teach undergraduate and graduate cell majors, and coordinate and supervise the activities of the cell section in a secondary teaching area such as string pedagogy, chamber music coaching, string bass, music education, or music technology considered an asset. Salary: Commensurate with qualifications and experience. Salary floors: Asst. Prof. \$37,586; Assoc. Prof. \$50,117; Full Prof. \$63,155. Appointment date: September 1, 1996. Closing date for applications: May 31, 1996, or until position is filled. Application process: Submit a letter of interest, curriculum vitae, and three letters of recent performance. In addition, applicants should arrange for three letters of reference. All materials should be sent to: Ronald Goddard, DMA, Acting Dean, School of Music, Brandon University, Brandon, MB R7A 6A9 Canada; e-mail: goddard@brun.ca. The School of Music has a rich tradition of excellence in string performance and pedagogy at both the undergraduate and graduate levels. As a major centre of string activity, the School is supported by a well-established string program in the School of Music, the Chaplin String Quartet (non-graduate school), and a professional chamber orchestra, opera, and the University of Manitoba. The University has a strong reputation for its music programs. Both men and women are encouraged to apply.

## NATIVE STUDIES

**UNIVERSITY OF SASKATCHEWAN** — Department of Native Studies. The University of Saskatchewan has two positions in the Department of Native Studies. The first position is a tenure track position at the Assistant Professor level commencing July 1, 1996. A minimum of a Master of Arts degree is required. The Department is especially interested in a candidate with a social science background and a specialization in one or more of the following areas: Metis history and politics. Theoretical perspectives in Native studies. Cultural and social issues. Candidates must have an active interest in research. Teaching duties include senior courses as well as teaching in introductory Native studies courses. The Department has a Ph.D. student a Bachelor of Arts, Bachelor of Arts (Honours) and the Master of Arts degrees. The second position is a part-time position at the level of Lecturer. This entails teaching first and second year Native Studies courses. Candidates should submit a curriculum vitae, curriculum vitae, and three letters of reference to be forwarded to: Dr. Frank Tuck, Department of Native Studies, 104 McLean Hall, 106 Wiggins Road, Saskatoon, Saskatchewan, S7N 5E6. Telephone: (306) 566-6208 or e-mail: tuck@usask.ca. The competition will close when the positions are filled. This advertisement is specifically directed to Aboriginal peoples and persons with disabilities. In accordance with Canadian immigration requirements, the advertisement is directed to Canadian citizens and permanent residents. The University of Saskatchewan is committed to the principle of employment equity.

## NURSING

**THE UNIVERSITY OF ALBERTA** Faculty of Nursing is seeking for five (5) highly qualified individuals for teaching positions beginning July 1997 at the assistant or associate professor level. The successful candidate(s) will have a PhD degree and be able to teach undergraduate and graduate courses in nursing. Ideal candidates will have doctoral degrees, preferably in nursing. Other qualifications include, but are not limited to, a master's degree in nursing and an established program of research reflected in publications in refereed journals. Applicants must hold current nursing registration in Alberta or be eligible to be registered as a nurse in the Province of Alberta. Applicants should submit a curriculum vitae, a teaching dossier and the names of three referees to: Dr. Marilyn L. Wood, Dean, Faculty of Nursing, University of Alberta, 3-12 Clinical Sciences Building, Edmonton, Alberta, Canada T6G 2G3. Closing date: September 1, 1996. The University of Alberta is committed to the principle of equity in employment. As an employer we welcome diversity in the workplace and encourage applications from all qualified women and men, including aboriginal peoples, persons with disabilities, and members of visible minorities.

## OUTDOOR RECREATION, PARKS & TOURISM

**LAKEHEAD UNIVERSITY** — The School of Outdoor Recreation, Parks and Tourism at Lakehead University invites applications for two probationary (tenure-track) appointments commencing August 1, 1996. Applicants should have a minimum doctorate and demonstrated expertise in one of the following areas: 1. Natural Resource Based Tourism and Commercial Recreation with background and expertise in one or more of the following areas: management, marketing, entrepreneurship, consumer behaviour, organizational behaviour. 2. Outdoor Recreation Leadership with background and expertise in one or more of the following areas: outdoor recreation skills, leadership, group dynamics, administration, program planning, experiential education, professional ethics, interpretation. In addition, preference will be given to applicants who can contribute to at least one of the other streams in the program, such as leadership, parks or tourism. Candidates should have demonstrated excellence in teaching, and a strong publication record commensurate with level of experience. The successful applicant will be responsible for final budget approval. The deadline for receipt of applications is June 1, 1996. Interested applicants should send a cover letter, curriculum vitae, and the names and addresses of three referees to: Professor Tom Stevens, Acting Director, School of Outdoor Recreation, Parks and Tourism, Lakehead University, 955 Oliver Road, Thunder Bay, Ontario, P7B 5E1. (807) 347-8756 (voice); (807) 346-7838 (fax). In accordance with Canadian immigration regulations, this advertisement is directed to Canadian citizens and permanent residents of Canada. The University of British Columbia encourages applications from qualified women or men, members of visible minorities, aboriginal peoples and persons with disabilities.

should have demonstrated excellence in teaching, and a strong publication record commensurate with level of experience. The successful applicant will be responsible for final budget approval. The deadline for receipt of applications is June 1, 1996. Interested applicants should send a cover letter, curriculum vitae, and the names and addresses of three referees to: Professor Tom Stevens, Acting Director, School of Outdoor Recreation, Parks and Tourism, Lakehead University, 955 Oliver Road, Thunder Bay, Ontario, P7B 5E1. (807) 347-8756 (voice); (807) 346-7838 (fax). In accordance with Canadian immigration regulations, this advertisement is directed to Canadian citizens and permanent residents of Canada. The University of British Columbia encourages applications from qualified women or men, members of visible minorities, aboriginal peoples and persons with disabilities.

## PHARMACOLOGY

**UNIVERSITY OF SASKATCHEWAN**, Department of Pharmacology invites applications for a two-year term appointment at the Assistant Professor level to commence September 1, 1996. Candidates must have a PhD and post-doctoral experience. Evidence that the applicant is a research-oriented scientist and has the potential to establish an independent research program is required. This position has been created for advertising at the two-tier level. Applications are invited from qualified individuals regardless of their immigration status in Canada. The University of Saskatchewan is committed to the principles of employment equity and welcomes applications from all qualified candidates. Women, people of aboriginal descent, members of visible minorities and people with disabilities are encouraged to apply. Applicants as members of these designated groups should submit their curriculum vitae, recent copies of published work, the names and addresses of three referees, and a statement of their teaching and research interests to: Dr. R. H. Hildebrand, Department of Pharmacology, University of Saskatchewan, Saskatoon, Sask., Canada, S7N 5E6. The deadline for receipt of applications is June 1.

## PHILOSOPHY

**UNIVERSITY OF WATERLOO** — Philosophy. Applications are being accepted for a tenure-track position at the Assistant Professor level in Philosophy beginning September 1, 1996. The successful candidate must have a PhD in Philosophy and an actively developing research program. Duties include teaching, research at the undergraduate and graduate level, and supervising graduate students. Salary range commensurate with qualifications and experience. Applications will be accepted until position is filled. Send curriculum vitae and arrange for three letters of reference to be sent to: Professor Richard Holmes, Chair, Department of Philosophy, University of Waterloo, Waterloo, Ontario N2L 3G1 Canada. E-mail: rholmes@uwaterloo.ca. In accordance with Canadian immigration requirements, the advertisement is directed to Canadian citizens and permanent residents. The University of Waterloo encourages applications from qualified individuals, including women, members of visible minorities, native peoples, and persons with disabilities. This appointment is subject to the availability of funds.

## PHYSICAL THERAPY

**UNIVERSITY OF ALBERTA** — Department of Physical Therapy. Applications are invited for full-time tenure track positions in the Dept. of

Physical Therapy at the University of Alberta. The Department is located in renovated facilities within the Faculty of Rehabilitation Medicine and offers two degrees: an entry-level BSc degree in Physical Therapy, and an MSc degree in Physical Therapy. The Department also participates fully in an interdisciplinary PhD degree program in Rehabilitation Science. Faculty members in the Department have active research affiliations with the Perinatal Research Centre, the Gerontology Centre, the Rick Hansen Centre (studies of spinal cord injured athletes), the David S.atcher Center of Child Psychology, Mental Health and Child Health Programs. The successful applicant is expected to provide leadership in clinical, educational and research aspects of clinical physical therapy for the Mental Health and Child Health Programs of the Capital Health Authority, and will also be a Division Officer in the Department of Physical Therapy, Faculty of Medicine. This position will also relate to the administration of the hospital in which there are three divisions of physical therapy, and to the administration of the Child and Adolescent Services Association (a major provider of child and adolescent mental health and disability services). The person shall be considered the designated individual to advise on child psychiatry issues in the region on behalf of the Child Health and Mental Health Program Councils. The successful candidate will have strong leadership skills and a commitment to the academic development of child psychiatry in Northern Alberta. The successful candidate will also be expected to support and strengthen the child psychiatry portion of the Postgraduate Training Program in Psychiatry, and to promote research into child mental illness in conjunction with the University's Departments of Psychiatry and Pediatrics. Applicants must be eligible for licensing with the College of Physicians and Surgeons of Alberta. The appointment will be full-time geographic. The University rank salary will be Assistant Professor (\$39,200 - \$53,664), Associate Professor (\$44,572 - \$59,036), or Professor (\$60,355 upwards with opportunity for additional clinical and administrative management). Deadline for applications: May 31, 1996. In accordance with Canadian immigration requirements, this advertisement is directed to Canadian citizens and permanent residents. Candidates should forward their curriculum vitae and the names of three referees to: Dr. Roger C. Bland, Professor and Chair, Department of Psychiatry, University of Alberta, 114-24 McKenzie Centre, Edmonton, Alberta T6G 2G6. The University of Alberta is committed to the principles of equity in employment. As an employer we welcome diversity in the workplace and encourage applications from all qualified women and men, including aboriginal peoples, persons with disabilities, and members of visible minorities.

## PHYSICS

**UNIVERSITY OF SASKATCHEWAN** — Department of Physics and Engineering Physics. Applications are invited for an appointment to a tenure stream position in the Department of Physics and Engineering Physics, University of Saskatchewan (subject to budgetary arrangement), at the rank of Assistant Professor. Duties will include undergraduate teaching and research responsibilities within the Institute of Space and Atmospheric Sciences. The Institute program is strongly linked to the Canadian Space Agency. Candidates must have a degree and experience which qualify them for registration as a Professional Engineer. Candidates must also hold a PhD degree or equivalent and have experimental and/or theoretical research experience in areas such as: Atmospheric Sciences, Acoustics and Dynamics of Ionospheric, Auroral and Magnetospheric Processes. Applications describing the proposed contribution to teaching and research should be sent to: Dr. H.S. Caplan, Head, Department of Physics and Engineering Physics, University of Saskatchewan, 116 Science Place, Saskatoon, SK S7N 5E5 Canada. Fax: (306) 566-6402; e-mail: caplan@phys.ualberta.ca. It is hoped that the successful candidate will require up to 10% of his/her duties by September 1, 1996. Applications should be sent to the University of Saskatchewan, this advertisement is directed to Canadian citizens and permanent residents of

Canada. The University of Saskatchewan is committed to the principles of Employment Equity and welcomes applications from all qualified candidates. Women, people of aboriginal descent, members of visible minorities, and people with disabilities are invited to identify themselves as members of these designated groups on their applications.

## PSYCHIATRY

**UNIVERSITY OF ALBERTA** — Applications are invited from psychiatrists for the position of Clinical Head, Section of Child Psychiatry, Mental Health and Child Health Programs. The successful applicant is expected to provide leadership in clinical, educational and research aspects of child psychiatry for the Mental Health and Child Health Programs of the Capital Health Authority, and will also be a Division Officer in the Department of Psychiatry, Faculty of Medicine. This position will also relate to the administration of the hospital in which there are three divisions of physical therapy, and to the administration of the Child and Adolescent Services Association (a major provider of child and adolescent mental health and disability services). The person shall be considered the designated individual to advise on child psychiatry issues in the region on behalf of the Child Health and Mental Health Program Councils. The successful candidate will have strong leadership skills and a commitment to the academic development of child psychiatry in Northern Alberta. The successful candidate will also be expected to support and strengthen the child psychiatry portion of the Postgraduate Training Program in Psychiatry, and to promote research into child mental illness in conjunction with the University's Departments of Psychiatry and Pediatrics. Applicants must be eligible for licensing with the College of Physicians and Surgeons of Alberta. The appointment will be full-time geographic. The University rank salary will be Assistant Professor (\$39,200 - \$53,664), Associate Professor (\$44,572 - \$59,036), or Professor (\$60,355 upwards with opportunity for additional clinical and administrative management). Deadline for applications: May 31, 1996. In accordance with Canadian immigration requirements, this advertisement is directed to Canadian citizens and permanent residents. Candidates should forward their curriculum vitae and the names of three referees to: Dr. Roger C. Bland, Professor and Chair, Department of Psychiatry, University of Alberta, 114-24 McKenzie Centre, Edmonton, Alberta T6G 2G6. The University of Alberta is committed to the principles of equity in employment. As an employer we welcome diversity in the workplace and encourage applications from all qualified women and men, including aboriginal peoples, persons with disabilities, and members of visible minorities.

## PSYCHOLOGY

**UNIVERSITE LAURENTIENNE** — Le département de psychologie à l'Université Laurentienne sollicite des candidats pour un poste de professeur(e) en psychologie expérimentale. Ce poste, au rang de professeur(e), est à durée limitée de un an et sera sujet à l'approbation budgétaire. La personne sélectionnée doit détenir un doctorat, et avoir la compétence pour enseigner en français la psychologie expérimentale. La personne embauchée sera responsable de certains des cours suivants: Introduction à la psychologie, Méthodologie, Apprentissage, Perception, Psychologie cognitive, Motivation, etc. La date d'entrée en fonction est le 1<sup>er</sup> juillet 1996. Le traitement dépendra des qualifications et de l'expérience. Les candidats devront être reçus au plus tard le 25 mai 1996. Les personnes intéressées doivent faire parvenir leur candidature accompagnée d'un curriculum vitae et des notes et adresses de trois répondants à: M. Van der Kelen, Directeur, Département de psychologie, Université Laurentienne, Chemin du Lac Ramney, Sudbury (Ontario), P3E 2C6. Conformément aux règles de l'immigration canadienne, cette offre s'adresse d'abord aux personnes de citoyenneté canadienne et aux personnes domiciliées en permanence au Canada. L'Université Laurentienne encourage les personnes de toutes les origines ethniques et encourage toutes les personnes qualifiées, y compris les femmes, les autochtones, les membres de minorités visibles et les personnes handicapées à poser leurs candidatures.

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**UNIVERSITY OF SASKATCHEWAN** — Social Psychology. Applications are invited for a tenure-track Assistant Professor appointment effective July 1, 1996. We are looking for candidates who show promise in developing a strong theoretically-based program of research in any area of social psychology. We are especially, but not exclusively, seeking candidates who are developing a program of research areas such as: health psychology, psychology and law, forensic psychology, organizational psychology, community psychology, women's and gender studies, and native studies. Candidates willing and able to engage in interdisciplinary research in any of these areas are especially encouraged to apply. The successful applicant will be expected to have both undergraduate and graduate courses, supervise students with compatible research interests, and to contribute to the academic development of child psychiatry in Northern Alberta. The successful candidate will also be expected to support and strengthen the child psychiatry portion of the Postgraduate Training Program in Psychiatry, and to promote research into child mental illness in conjunction with the University's Departments of Psychiatry and Pediatrics. Applicants must be eligible for licensing with the College of Physicians and Surgeons of Alberta. The appointment will be full-time geographic. The University rank salary will be Assistant Professor (\$39,200 - \$53,664), Associate Professor (\$44,572 - \$59,036), or Professor (\$60,355 upwards with opportunity for additional clinical and administrative management). Deadline for applications: May 31, 1996. In accordance with Canadian immigration requirements, this advertisement is directed to Canadian citizens and permanent residents. Candidates should forward their curriculum vitae and the names of three referees to: Dr. Roger C. Bland, Professor and Chair, Department of Psychiatry, University of Alberta, 114-24 McKenzie Centre, Edmonton, Alberta T6G 2G6. The University of Alberta is committed to the principles of equity in employment. As an employer we welcome diversity in the workplace and encourage applications from all qualified women and men, including aboriginal peoples, persons with disabilities, and members of visible minorities.

**UNIVERSITY OF SASKATCHEWAN** — Developmental Psychology. Applications are invited for a tenure-track Assistant Professor appointment effective July 1, 1996. We are looking for candidates who show promise in developing a strong theoretically-based program of research in any area of developmental psychology. In particular, we seek candidates who are developing a program of research areas such as: adolescence, reading and literacy, peer relations, social development, cultural or native studies, and women's and gender studies. We will also consider applications from candidates specializing in other areas of psychology. Candidates willing and able to engage in interdisciplinary research are especially encouraged to apply. The successful applicant will be expected to teach both undergraduate and graduate courses, supervise students with compatible research interests, and to contribute to the academic development of child psychiatry in Northern Alberta. The successful candidate will also be expected to support and strengthen the child psychiatry portion of the Postgraduate Training Program in Psychiatry, and to promote research into child mental illness in conjunction with the University's Departments of Psychiatry and Pediatrics. Applicants must be eligible for licensing with the College of Physicians and Surgeons of Alberta. The appointment will be full-time geographic. The University rank salary will be Assistant Professor (\$39,200 - \$53,664), Associate Professor (\$44,572 - \$59,036), or Professor (\$60,355 upwards with opportunity for additional clinical and administrative management). Deadline for applications: May 31, 1996. In accordance with Canadian immigration requirements, this advertisement is directed to Canadian citizens and permanent residents. Candidates should forward their curriculum vitae and the names of three referees to: Dr. Roger C. Bland, Professor and Chair, Department of Psychiatry, University of Alberta, 114-24 McKenzie Centre, Edmonton, Alberta T6G 2G6. The University of Alberta is committed to the principles of equity in employment. As an employer we welcome diversity in the workplace and encourage applications from all qualified women and men, including aboriginal peoples, persons with disabilities, and members of visible minorities.

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The University of Alberta is committed to the principle of equity in employment. As an employer we welcome diversity in the workplace and encourage applications from all qualified women and men, including aboriginal peoples, persons with disabilities, and members of visible minorities.

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Al Jacobson  
KPMG Executive Search  
2800 Canada Trust Tower  
Edmonton, Alberta T5J 3V8  
Fax (403) 424-2465



## Annonces classées

Canadian citizens and permanent residents. Other qualified applicants are also invited to apply. The University of Saskatchewan is committed to the principles of employment equity and welcomes applications from all qualified candidates. Women, people of aboriginal descent, members of visible minorities and people with disabilities are invited to identify themselves as members of these designated groups on their applications. Applicants should submit a curriculum vitae and arrange to have three letters of reference sent to Dr. Jim Sessman, Department of Psychology, University of Saskatchewan, 5 Campus Drive, Saskatoon, SK, Canada S7N 5A5. The deadline for applications is May 31, 1996 but applications submitted later may be considered.

## CAUT ACPPU

### PUBLISHER'S STATEMENT DECLARATION DE L'ÉDITEUR

The publisher will not accept advertisements of academic positions restricting applications on grounds of race, national origin, religion, colour, sex, age, marital status, family status, ethnicity, handicap, sexual preference, social origin, or political beliefs or affiliations. CAUT expects that all academic positions advertised in the Bulletin are open to both men and women. Advertisements using gender specific language will not be accepted except when the language has been mandated by human rights legislation. Where any bona fide reasons for exemption from general policy stated above exist, it is the responsibility of the institution which intends to place a restrictive advertisement to provide the Editor of the Bulletin with a statement as to these reasons.

Many Canadian universities are signatories to the Federal Contractors Program. The program requires that suppliers of goods and services to the federal government who employ 100 persons or more and who want to bid on federal contracts (including research contracts) of \$200,000 or more must commit themselves to implementing employment equity as a condition of their bid. This commitment requires the identification and removal of artificial barriers to the selection, hiring, promotion and training of women, aboriginal peoples, persons with disabilities and visible minorities. As a result, applications for some positions advertised in the CAUT Bulletin may be asked to provide information of a confidential nature.

As a service to CAUT members interested in positions available in other countries, the Bulletin accepts advertisements for these positions. The view of academic freedom and the extent to which it is protected in other countries may vary. Except in the case of the United States, where the Association of American University Professors (AAUP) investigates alleged violations of academic freedom, there is no method by which we can provide any reliable information concerning the state of academic freedom at universities outside of Canada. CAUT publishes a list of universities censured by AAUP twice a year. Further information about those censures can be obtained by writing to AAUP, Suite 500, 1912 14th St. NW, Washington, DC 20005; Tel: 202-737-5900.

toral program in clinical psychology, a Boulder model orientation, and eligibility for Provincial registration are required. Applicants should submit a cover letter, vita and samples of scholarly work, and should arrange to have at least three letters of recommendation sent directly to Dr. Michael Ross, Chair, Department of Psychology, University of Waterloo, Waterloo, Ontario, Canada N2L 3G1. The application deadline is May 31, 1996. The appointment is subject to the availability of funds. The University of Waterloo encourages applications from all qualified individuals, including women, members of visible minorities, native peoples, and persons with disabilities. In accordance with Canadian immigration regulations, the advertisement is directed to Canadian citizens and permanent residents.

#### RELIGIOUS STUDIES

**SAINT MARY'S UNIVERSITY** — Department of Religious Studies, invites applications, subject to budgetary approval, for a tenure-track position at the level of Assistant Professor with a specialization in the Christian Tradition. The position will commence September 1, 1996. The department offers a major and honours programmes and participates actively in multi-disciplinary pro-

grammes, such as Atlantic Canada Studies, Women's Studies, Environmental Studies, International Development Studies, and Asian Studies. The successful candidate will have a PhD with a research and teaching specialization in Roman Catholic Church history and tradition. The candidate will also be expected to teach broadly on western religious traditions and introductory Bible and to offer courses in relevant multi-disciplinary programmes. Preference will be given to candidates demonstrating clarity of research focus and competence in undergraduate teaching. Applications should include a curriculum vitae, statement of research and teaching areas, course outlines, and three (3) confidential letters of reference sent directly to the Department Chairperson. Applications should be sent to Dr. Paul Bowley, Chair, Department of Religious Studies, Saint Mary's University, Halifax, Nova Scotia, B3H 3C3. Applications will be processed as they are received and until the position is filled.

#### SOCIOLOGY

**UNIVERSITY OF ALBERTA** — The Department of Rural Economy, one of four departments in the Faculty of Agriculture, Forestry and Home Economics, University of Alberta, invites applications for an Assistant Professor tenure-track position in Resource Sociology. Qualifications are: PhD in sociology, rural sociology, or associated social science discipline, with experience and interest in the sociology of resource sectors such as forestry, agriculture, land or water. The Assistant Professor salary range is \$33,232 to \$55,536. The position is available July 1, 1996. Applications, including a statement of research and teaching interests, curriculum vitae and the names of three referees, should be sent to: Michele Veeman, Chair, Department of Rural Economy, University of Alberta, Edmonton, Alberta T6G 2H1 by June 15, 1996. In accordance with Canadian Immigration requirements, this advertisement is directed to Canadian citizens and permanent residents of Canada. The University of Alberta is committed to the principle of equity in employment. As an employer, we welcome diversity in the workplace and encourage applications from all qualified women and men, including Aboriginal peoples, persons with disabilities, and members of visible minorities.

#### SOCIOLOGY & ANTHROPOLOGY

**MOUNT ALLISON UNIVERSITY** — The Department of Sociology and Anthropology invites applications for a one-year term position, subject to budgetary approval. The successful candidate will be an anthropologist with specialization in development studies and comparative gender studies and with a broad sense of the discipline. Teaching will include some core introductory and theory for methods courses. Teaching and research will be carried out in a context of increasing interdisciplinary cooperation and the use of innovative instructional and communication tools. Candidates should possess a PhD and have a record of undergraduate teach-

ing and of research. The appointment will be at the rank of Assistant Professor and will commence on July 1, 1996. The 1996-97 salary range for Assistant Professor is \$36,540 - \$43,708. An application should include a curriculum vitae and the names of three referees, and should be sent to: Professor Berkeley Fleming, Chair of the Search Committee, Department of Sociology and Anthropology, Mount Allison University, Sackville, NB E0A 3C0; Fax: (506) 364-3623. The closing date is May 22, 1996. As an employer we welcome diversity in the workplace and encourage applications from all qualified women and men, including aboriginal peoples, persons with disabilities, and members of visible minorities. In accordance with Canadian immigration requirements, this advertisement is directed to Canadian citizens and permanent residents.

#### SPANISH

**CONCORDIA UNIVERSITY** — The Department of Modern Languages & Linguistics at Concordia University invites applications for a 9-12 month Limited Term Appointment in Spanish at the level of Assistant Professor in Spanish effective August 15, 1996. The applicant must hold the degree of Ph.D. and possess native or near-native fluency in Spanish. The applicant must show commitment to research in the area of Spanish American literature and culture and be prepared to teach general courses at all undergraduate levels. Preference will be given to candidates with demonstrated experience in Spanish language pedagogy, familiarity with Computer Assisted Language Learning techniques and materials is an asset. In accordance with Canadian immigration requirements, priority will be given to Canadian citizens and permanent residents of Canada. Concordia University is committed to Employment Equity and encourages applications from women, aboriginal peoples, visible minorities and disabled persons. All things being equal, women candidates will be given priority. Deadline for applications is May 31, 1996. Please send a letter of application, curriculum vitae and names, addresses and telephone numbers of three references to: Dr. A. Tefterler, Dept. of Modern Languages & Linguistics, Loyola Campus, CH131, Concordia University, 1471 Sherbrooke St. West, Montreal, QC H4B 1R6.

#### STATISTICS

**UNIVERSITY OF MANITOBA** — The Department of Statistics at the University of Manitoba invites applications for a One Year Term (leave replacement) appointment at Assistant Professor rank in the field of Statistics. The appointment will begin on July 1, 1996 or as soon as possible thereafter. The successful candidate must have a PhD (completed or near completion) in Statistics and have demonstrated competence in teaching and research in Statistics. The position is subject to budgetary approval. The current salary range at Assistant Professor rank is \$40,888 - \$62,509. The University of Manitoba encourages applica-

tions from qualified women and men, including members of visible minorities, Aboriginal peoples and persons with disabilities. In accordance with Canadian Immigration requirements, this advertisement is directed to Canadian citizens and permanent residents. The University offers a smoke-free work environment, save for specially designated areas. Please send applications including an updated curriculum vitae and three letters of reference to: Dr. Smiley W. Cheng, Chair, Search Committee (Statistics), Department of Statistics, University of Manitoba, Winnipeg, Manitoba, R3T 2N2. Telephone: (204) 474-8172; Fax: (204) 275-5011. E-mail: Smiley.Cheng@UManitoba.ca. Closing date for receipt of applications is May 31, 1996.

#### THERAPEUTICS

**UNIVERSITY OF BRITISH COLUMBIA** — Protein Therapeutics. A position for a Research Associate will be available from 1 July 1996, in the field of demyelinating myelin structure and function. As part of a drug discovery program, antagonists have been synthesized. The applicant will functionally characterize various forms of these using human and animal cells. Experience in the preparation of iodine-125 labelled cytokines for receptor affinity analysis and leukocyte chemotaxis and activation assays. These models will be used to study the effects of the antagonists on chronic inflammation. Considerable experience in the handling of laboratory animals and use of isotopic pump delivery is necessary, as well as the design of protocols and analysis of results. A thorough knowledge of protein chemistry and therapeutic pharmacology is desirable. A PhD in a related field is required with four or more years of postdoctoral experience. Deadline for applications is 31 May, 1996. Salary will be commensurate with qualifications and experience. Send curriculum vitae to the attention of The Administrator, The Biomedical Research Centre, 2222 Health Sciences Mall, The University of British Columbia, Vancouver, BC, V6T 1Z3. UBC welcomes all qualified applicants, especially women, aboriginal people, visible minorities and persons with disabilities. In accordance with Canadian Immigration requirements, priority will be given to Canadian citizens and permanent residents of Canada.

#### VETERINARY MEDICINE

**UNIVERSITY OF GUELPH** — Department of Clinical Studies/Veterinary Teaching Hospital, Contractually Limited, 8 to 12 months Commencing August 1, 1996. The Department of Clinical Studies, University of Guelph, is seeking applications for a contractually limited Professional Assistant position in Large Animal Surgery commencing on or about August 1, 1996. The prime responsibilities of the position involve: 86% clinical teaching service in the Veterinary Teaching Hospital teaching large animal surgery. Position will involve night and weekend clinical teaching responsibilities. There will be limited opportunities for lecturing and no opportunity for administrative activities or research. Requirements for the position include: DVM or equivalent degree and applicants must be licensed or eligible to be licensed to practice veterinary medicine in the Province of Ontario. Applicants must have completed a Residency Training Program approved by the ACVPS. Preference will be given to candidates with documented superior clinical teaching skills in an undergraduate DVM Program. The University of Guelph is committed to an employment equity program that includes special measures to achieve diversity among its faculty and staff. We therefore particularly encourage applications

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## MAY 1996 MAI 23 SPECIAL EDITION



## Afterword ■ Conclusion

# The Down Side of Downsizing

IN THE LAST FEW MONTHS there has been vigorous debate in the Canadian and American press about the merits and effects of corporate downsizing. Just as doubts begin to creep in among businessmen, some academic administrators have begun to burn with a zeal to emulate the most brutal of the cutters.

Even *The Globe and Mail* has discovered that downsizing has its costs. It noted that a survey by the American Management Association found that among 700 companies that had downsized, productivity rose in 34 per cent of the cases — but it fell in 30 per cent. In 83 per cent of the cases employee morale declined.

It cited the downsizing of Petrocan where one long-serving and loyal employee noted: "...downsizings also hurt the company...because the people left behind lose the incentive to go the extra mile for their employer. A lot of people used to think that job security came from being a quality performer. When they see stuff like that happen, they start to realize that the quality of your performance doesn't matter."

A recent book by Frederick Reichfield, entitled *The Loyalty Effect*, had the same message. "No one," he writes, "ever thought about measuring defects in a plant until after the Second World War. Now you can't find a manufacturing facility without statistical process control." However, he argues, in their zeal for accounting numbers and statistical analysis, business has lost sight of the importance of employee loyalty.

"They've built intricate cost-accounting systems to measure productivity, but almost all of them apply to inanimate objects rather than to the human assets that ultimately drive a business." Unmotivated work forces, he suggests, will not go the extra mile to win over customers and gain a competitive edge.

*The Guardian* in the United Kingdom has focused attention recently on economists such as Robert Putnam at Princeton and Douglass North, a Nobel-prize winner at Washington University in St. Louis who argue that social capital is an essential ingredient in economic growth.

By this they mean rich traditions of civic action groups, trade unions, clubs and associations and that the need for quality and innovation requires an integrity of relationships between the workforce, suppliers and financiers. The sourness and lack of trust created by downsizing may have, they suggest, longer term effects that are more serious than the short-term financial gain.

It is clear that Pat Buchanan in the United States touched a nerve, even in the Republican Party, with his vigorous attacks on an uncaring and selfish corporate America. It will be interesting to see if anyone in Canada tries to tap the same vein and with what results. David Lewis, where are you? ■

## L'envers de la rationalisation

DEPUIS QUELQUES MOIS, les mérites et les effets de la rationalisation font couler beaucoup d'encre dans la presse canadienne et américaine. Alors que les gens d'affaires commencent à douter de son bien-fondé, les administrateurs universitaires réduisent allègrement leurs effectifs.

Le *Globe and Mail* a même publié les résultats d'une enquête américaine auprès de 700 compagnies révélant que la rationalisation a fait hausser et diminuer la productivité à peu près dans les mêmes proportions.

Dans son dernier ouvrage intitulé *The Loyalty Effect*, Frederick Reichfield constate que les entreprises ont perdu de vue l'importance de la loyauté chez leurs employés en se lançant aveuglément dans l'analyse statistique et le calcul. Elles ont mis au point des méthodes compliquées d'évaluation de la productivité qu'elles ont appliquées à des objets plutôt qu'aux êtres humains, les moteurs de l'entreprise.

Le capital social est un ingrédient essentiel de la croissance économique. La qualité et l'innovation passent par l'intégrité des rapports entre la main-d'oeuvre, les fournisseurs et les financiers. L'absence de confiance découlant de la rationalisation peut avoir des effets à long terme plus graves que les gains pécuniaires à court terme. ■

